Originally Processed With FOIA(s):
2001-1865-F; 2001-1978-F

FOIA Number:
2001-1978-F

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Subseries: Environmental Subject Files

OA/ID Number: 45125
Folder ID Number: 45125-019

Folder Title:
Clean Air Act - General [2]

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CLEAN AIR ACT AMENDMENTS

Bush Administration Report

on

S. 1630
(as reported November 16, 1989)

January 25, 1990

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I. EXECUTIVE SUMMARY

A. The Issue

Last June, President Bush announced comprehensive legislation to provide clean air for all Americans. The President's bill, "The Clean Air Act Amendments of 1989", was submitted to Congress in July 1989. In November 1989, the Senate Environment and Public Works Committee reported its own clean air bill, S. 1630. This report highlights the similarities and differences between the two proposals and offers the views of the Administration.

S. 1630 and the President's proposal both require new measures to assure near-term attainment of urban air quality standards; establish a new acid rain control program; restrict emissions of toxic air pollutants; and strengthen enforcement and permitting programs. Nevertheless, there are important distinctions between the two proposals. Compared to the President's proposal, S. 1630 is not cost-effective. The Senate bill more than doubles the cost of cleaning the Nation's air, while providing little incremental environmental benefit beyond the package proposed by the President. Specifically, S. 1630 achieves about the same environmental results as the President's proposal, but does so for approximately $42 billion annually (in 2005); over double the overall cost of the President's proposal, estimated to be approximately $19 billion annually (in 2005).

The higher cost associated with S. 1630 is due in large part to its emphasis on specific, mandatory and uniform requirements to the neglect of more targeted measures. S. 1630 does not provide enough discretion to EPA and other federal agencies, and often denies to States and localities the opportunity to use their expertise in designing and implementing control measures that vitally affect lifestyles. Rather, S. 1630, with its abundance of mandates, reflects a belief that the Bill's authors are better able to understand and solve complex air pollution problems than the states. This theme is present throughout S. 1630.

In deciding on control measures to include in the President's proposal, the Administration has been careful to respect one of the Clean Air Act's fundamental premises: that the development and implementation of area specific pollution control measures is done best, and most cost-effectively, by state and local governments. Nationwide measures notwithstanding, the President's proposal consistently allows states and localities to demonstrate that substitution for measures called for in the President's proposal is consistent with timely achievement of air quality goals. Without flexibility combined with strong federal guidance and oversight, solutions to air quality problems around the nation will be overly costly and less effective.

B. The President's Proposal

The President's proposal, offering the first comprehensive revisions to the Clean Air Act since 1977, is designed to curb three major threats to the nation's environment and to the health of millions of Americans: acid rain, urban air pollution, and toxic air emissions. While emissions of some pollutants--such as lead and carbon monoxide--have been greatly reduced since the Clean Air Act was passed in 1970, progress has not come quickly enough for other pollutants. Much remains to be done.

The proposal sets forth five important goals:

1. Protecting the public's health
2. Achieving early emissions reductions and maintaining steady progress
3. Harnessing the power of the marketplace
4. Employing innovative cost-effective pollution control technologies
5. Reconciling the automobile with the environment

This seven-title legislative proposal represents actions that the Administration believes will meet these goals. Enactment of the proposal would accelerate the pace of pollution reduction and put America on a path toward markedly cleaner air by the end of the century: acid rain pollutants would be reduced by nearly half, most urban areas in the country would finally attain national clean air standards, and toxic air pollutants would be slashed by tens of millions of pounds a year. The proposal also reflects a need to fix existing enforcement provisions and employ a new integrated permits program.

Acid Rain

As many are aware, acid rain occurs when sulfur dioxide and nitrogen oxide emissions are transformed in the atmosphere and return to the earth in rain, fog or snow. Approximately 20 million tons of SO2 are emitted annually in the U.S., mostly from the burning of fossil fuels by electric utilities. Acid rain damages lakes, harms forests and buildings, contributes to reduced visibility, and, according to some studies, contributes to thousands of premature deaths each year in areas with high levels of acid aerosols.

The President's acid rain program will reduce annual sulfur dioxide (SO2) emissions by 10 million tons below 1980 levels, preserve this reduction with a cap on emissions, and limit the overall growth in nitrogen oxide (NOx) emissions. Emission reductions would be achieved in two phases -- Phase I reductions would be required after December 31, 1995, and Phase II reductions would be required after December 31, 2000. The proposal also calls for a three-year extension of the Phase II deadline for plants adopting clean coal repowering technologies, combined with

regulatory incentives designed to smooth their transition into the marketplace.

The President's proposal represents a major innovation in harnessing the power of the marketplace to protect the environment. A new system of tradeable emission allowances will allow utilities and other affected sources to achieve emissions reductions at the lowest possible cost. Allocation of control costs among affected sources throughout the allowance program will obviate the need for the imposition of broad based taxes and emissions fees on other parties.

Urban Air Quality

The President's proposal also addresses the urban air pollution problems of ozone (smog), carbon monoxide (CO) and particulate matter (PM10). Currently, over 100 million Americans live in cities which are out of attainment with the public health standards for ozone. The health effects of ozone include impaired breathing, heart diseases, permanent lung structure damage, increased susceptibility to lung disease, and premature mortality.

The most widespread and persistent urban pollution problem is ozone. The great differences in the severity of this problem among urban areas, the distribution of ozone precursor emissions (primarily volatile organic compounds) among a variety of small stationary sources categories and motor vehicles, and the transport of ozone from area to area are factors that call for a carefully targeted mix of control measures.

The President's proposal creates four categories of urban areas based on the severity of their ozone problems and sets different attainment deadlines and control requirements for each category as appropriate. The proposal calls for nationwide ozone control measures where such measures are more sensible, environmentally sound, and cost-effective than measures designed by states and localities. For example, the President's proposal calls for nationwide automobile tailpipe standards because it would be prohibitively costly and impractical to require auto makers to build a different car for each state.

Alternatively, the President's proposal calls for ozone control measures targeted only to areas with the more severe ozone problems in cases where such measures would be necessary for attainment and would be cost-effective. For example, in the absence of unacceptable restrictions on vehicle use, it is unlikely that the worst nonattainment areas will attain air quality standards without a clean fuels program, such as the one called for in the President's proposal. The nine worst ozone areas would be required to phase in clean fuel and clean-fueled vehicle use over a ten-year period. On the other hand, areas with less severe ozone problems could come into attainment through the implementation of any of several control measures. These areas would be free to

choose the measures they find most desirable on the basis of environmental and economic considerations.

Toxic Air Pollution

The President's proposal offers a comprehensive plan for achieving significant reductions in emissions of hazardous air pollutants from major sources. Industry reports in 1987 suggest that an estimated 2.7 billion pounds of toxic air pollutants were emitted into the atmosphere, contributing to approximately 1500-3000 cancer fatalities annually. The President's program would improve EPA's ability to address this problem effectively and would dramatically accelerate progress in controlling major toxic air pollutants. It requires that the best technology available to cut toxic air pollutants be applied to sources. It promises progress in regulating sources of toxic air emissions on a set schedule, and it encourages voluntary reductions early by providing credit for those reductions against the best technology requirement. The President's proposal also assumes that any unreasonable risks remaining after the best control technology is applied will be addressed.

Permitting and Enforcement

The President's proposal provides the necessary tools for implementing and enforcing the Clean Air Act Amendments through new enforcement provisions and an integrated permits program. The essence of the permits program is to require certain sources of pollution to operate under a permit that clearly sets out all of the source's pollution control obligations under the state implementation plan or other Clean Air Act requirements

The permits program not only will make the Act more consistent with other environmental statutes, but it will clarify and make more enforceable an air pollution source's emission control requirements. It will provide a ready vehicle for states to administer, with Federal oversight, portions of the proposed air toxics and acid rain programs. Further, it will simplify and shorten the procedures that a source must follow to change its pollution control obligations. Finally, through the fee provisions, the permit program will greatly augment state's resources to administer pollution control programs by requiring sources of pollution to pay their fair share of the costs of the air pollution programs.

The President's proposed enforcement provisions are designed to update the Clean Air Act by including flexible enforcement authorities contained in other recently amended laws. They strengthen and clarify the Act's enforcement authorities in several areas including criminal enforcement, citizen suit enforcement, and administrative enforcement.

C. S. 1630 CRITIQUE SUMMARY

While S. 1630 contains many features similar to those in the President's proposal, it has several major deficiencies. First, S. 1630 more than doubles the cost of cleaning the air, while providing little incremental environmental benefit above that proposed in the Administration's bill. As mentioned, S. 1630 will cost approximately $42 billion annually (in 2005), more than double the cost of the President's proposal (approximately $19 billion annually).[1]

Second, S. 1630 substitutes the judgement of the bill's authors for the judgement of EPA and other Federal agencies. S. 1630 tells EPA how much of a reduction to get from consumer products before it can reasonably be known what reductions are feasible and what they will cost. It requires EPA and DOT to impose specific sanctions regardless of EPA's judgement as to what sanctions, if any, are appropriate. It takes away the Interior Department's stewardship of Outer Continental Shelf resources.

Third, it substantially erodes the responsibility for air pollution control that the Clean Air Act trusts to state and local governments. S. 1630 removes from state and local governments the authority to designate nonattainment areas and to delineate area boundaries. It dictates specific controls for attainment areas within ozone transport regions. It mandates potentially socially disruptive transportation control measures.

Fourth, it includes extraneous provisions. Stratospheric ozone issues should be addressed as part of international negotiations, and S. 1630's measures designed to prevent global warming are premature.

One of the most objectionable differences between the proposals is the Senate Committee's failure to include the President's proposed clean fuels program in S. 1630.

TITLE I - URBAN AIR QUALITY: S. 1630 and the President's proposal contain a number of different approaches for addressing the urban air quality problem. These differences result in annual Senate bill costs of about $3.4 billion higher than those of the President's urban air quality provisions (excluding mobile source provision costs).

S. 1630 and the President's proposal both recognize that

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[1] Breaking these costs down, the annual cost in 2005 of S. 1630's nonattainment provisions will be about $23.2 billion, as compared to $10.1 billion for the President's proposal. S. 1630's acid rain provisions will cost about $4.5 billion annually (in 2005), while the President's acid rain program will only cost $4.1 billion annually. As for toxic air pollution, the S. 1630 provisions will be more than double that of the President's proposal, with annual costs for S. 1630 being $14.2 billion annually (in 2005). The estimated annual cost of the President's air toxic provisions are estimated to be $4.7 billion (in 2005). Please refer to the report entitled, "Clean Air Act Cost Comparisons", dated January 23, 1990 for more details on costs.

deadlines for attaining air quality standards, federal requirements, and planning mechanisms contained in the current clean air legislation must be revised to achieve air quality goals. However, they respond to this understanding differently. Regarding attainment status designations, S. 1630 overturns the longstanding authority of states to identify, characterize, and report on air quality within their borders. Instead S. 1630 would designate nonattainment areas as a matter of law. The Administration bill's approach is superior because it recognizes the States' incentive to make designations so as to impose control costs on those responsible for nonattainment, and to ultimately reach attainment.

Regarding thresholds and attainment deadlines, the President's proposal and S. 1630 differ on "thresholds" for determining which nonattainment areas will be required to impose what control requirements. S. 1630 contains broader classification ranges, which the Administration believes may result in over-control in many areas with only marginal air pollution problems.

S. 1630 also contains a variety of control program provisions, such as fees, progress requirements, attainment demonstrations, stationary source controls and transportation control measures, that are more stringent and less cost-effective than the President's proposal. Such provisions are not supported by the Administration because they mandate control programs, rather than establish a menu from which states can select the approach best suited to address their particular air quality problems.

Sanctions under S. 1630 are mandatory when a state fails to develop and implement pollution control strategies, regardless of whether a state is making all reasonable efforts to address an air pollution problem. The Administration believes this approach is inappropriate because it fails to provide flexibility needed for evaluating whether applying sanctions for solving a particular problem is the best course of action. Reflecting this concern, the President's proposal allows EPA discretion when deciding whether and which sanctions are the best solution.

Flexibility is also at the heart of the difference between the Federal Implementation Plan (FIP) provisions of the two proposals. The S. 1630 FIP provisions require EPA to develop and implement a FIP under certain conditions, such as when sanctions have failed to bring about state action. The Administration objects to this approach because it fails to offer the flexibility needed to determine whether a FIP can solve complex local problems. Under the President's proposal, EPA retains authority to develop a FIP or a partial FIP if it concludes such action is useful and necessary.

While both proposals recognize the problem of ozone transport in the Northeast by establishing a Northeast Ozone Transport Commission, S. 1630 presumes the need for expensive control

programs even before the Commission evaluates the specific reasons for the problem. This is likely to lead to costly over-control in some areas with no environmental benefit. The President's proposal permits the Commission to recommend controls as necessary after full consideration of the transport area's varying problems.

S. 1630 would modify the definition of major stationary source from that contained in the current law. By redefining major stationary sources as those with emissions of at least 25 tons per year, S. 1630 will increase the number of sources subject to new source review permit and control technology requirements. The Act currently defines major sources as those with emissions of at least 100 tons per year. This change will result in unnecessary costs, with little environmental benefit, since, in the aggregate, emissions from the additional sources that would be subject to review and control are small.

S. 1630 would also change netting requirements by disallowing the present use of the "plantwide" definition in determining whether or not a source is subject to new source review permit requirements. This modification would hinder the ability of a source to "net out" or remain beneath emission thresholds that trigger the Act's permitting requirements. The result of this change will be unnecessary costs, paperwork, and delay in new projects, with little or no environmental benefits.

TITLE II - MOTOR VEHICLES: The mobile source provisions in S. 1630 differ from the provisions in the President's proposal in four key areas. These differences result in Senate bill motor vehicle provision costs of about $11 billion more than those in the President's proposal.[2]

First, there is a major difference in the approach used to achieve further reductions in auto tailpipe emissions beyond the so-called Tier I tailpipe standards that are included in both proposals. The Administration believes that even more tailpipe reductions are needed in our most polluted cities. The President proposes to achieve these reductions through an innovative program to introduce clean cars and clean fuels. This program requires 1995 cars in certain cities to meet the equivalent of the Senate 2003 smog standards 8 years before 2003. Furthermore, the President's post-2000 car would have almost 70% lower ozone-causing emissions than the Senate's 2003 car. Other states or cities which desire these emissions reductions may opt into the clean fuels program under the President's proposal. S. 1630, on the other hand, requires that expensive emission control equipment be added to cars nationwide and does not allow for the potential benefits of cleaner fuels in combination with cleaner cars to be

[2] $11 billion includes costs attributable to S. 1630 for mobile source provisions that address air toxics.

realized. Rather, each car sold throughout the country will be forced to have expensive new equipment which gives less environmental benefits at a much slower pace than under the President's proposal.

Second, S. 1630 includes a requirement for reductions in carbon dioxide (CO2) emissions from auto tailpipes. This is an effort to address emissions of greenhouse gases and is essentially a mandate to improve auto fuel efficiency. The Administration strongly opposes the inclusion of these measures. It raises many new, significant and controversial issues into the Clean Air debate which is already loaded with controversy and would impede the chances of legislation this year.

Third, there is a serious difference in the magnitude of the enhanced inspection and maintenance (I/M) programs contained in the two proposals. Adopting the philosophy that pollution controls should focus on those areas needing them, the President proposed that serious and severe nonattainment areas be required to enhance their existing I/M programs. These are the areas needing significant additional controls. S. 1630 leaps beyond this by making a costly proposal to require as many as 34 areas to implement entirely new I/M programs where none now exist. The Administration opposes this because it applies in places where such programs are not needed.

Finally, S. 1630 and the President's proposal differ on the fundamental issue relating to emissions during automobile refueling. While S. 1630 would require Stage II vapor recovery "at the gas pump" and "onboard" refueling controls (beginning in 1993) to reduce organic emissions during vehicle refueling, the President proposed that Stage II controls be targeted only to areas where such controls will be the most effective.

TITLE III - TOXIC AIR POLLUTION: Both S. 1630 and the President's proposal employ a technology-based approach to reduce toxic air pollution in a first phase. This method is a vast improvement over the current risk-based approach since it provides for the speedy application of control technology, rather than delaying controls while engaging in uncertain health risk analyses. Nevertheless, there are three important distinctions between the two proposals, resulting in a Senate proposal estimated to cost $9.5 billion more annually by 2005, with few extra emission reduction benefits.

The most significant distinction lies in the approach taken by each proposal toward limiting the residual public health risk remaining after the technology-based standards are applied. S. 1630 would require that all sources limit the most exposed person's risk of contracting cancer to one chance in one million or below. Those sources unable to meet this goal could qualify for an

exemption if controls are not available, but all sources must meet a 1 in 10,000 risk level or face closure. The potential costs of closure for industries that currently do not have the technical capability to limit their emissions could be billions of dollars.

The President's proposal acknowledges the uncertainty associated with estimating risk by allowing the Administrator to determine on a case by case basis, whether the residual risks are "unreasonable" considering certain key factors, including health risks and cost. In view of the uncertainty surrounding this matter, EPA must have this discretion in order to avoid promulgating rules that may close large segments of industry.

A second distinction is the number of regulations that each proposal would establish. S. 1630 would require all source categories to be regulated within 10 years. The President's proposal would also require all regulations to be in place within 10 years, but would allow EPA discretion in developing regulations for the lower 50% (the least risky) of the source categories. The Administration believes this discretion is essential to avoid costly efforts to develop regulations for sources that are determined not to warrant control, particularly in view of the fact that controlling the top 50% of the source categories, the most risky, will address 80% of the associated public health risk.

A final difference focuses on the accidental release and leak detection provisions in the two bills. Both proposals address this serious problem, however S. 1630 requires more stringent mandatory chemical hazard assessments, resulting in annual costs that are about $2.5 billion higher than those associated with the President's proposal. The President's proposal allows EPA to coordinate accidental release requirements with duplication. S. 1630 also requires costly mandatory leak detection systems that detect immediately and report concurrently all specified toxic leaks from all points in manufacturing facilities. The President's proposal allows EPA to consider a wider array of emergency detection systems, including the type of leak detection monitors required in S. 1630.

TITLE V - ACID RAIN: S. 1630 and the President's proposal are very similar on the major issues of the size and time of emissions reductions, the use of a market-based approach, the requirements for emissions offsets for new sources, and the absence of explicit cost sharing by means of taxes or fees. In addition, S. 1630 corrects two problems acknowledged by the Administration to exist in its acid rain provisions. First, by providing allowances for all clean sources (less than 1.2 lb SO2/mmBtu), S. 1630 acknowledges the special needs of clean sources to have room to grow. S. 1630 also assures that upon retirement of the clean sources allowances will become available for new sources, thus ensuring that a nationwide electric utility SO2 emission cap of 10

million tons per year is maintained. Finally, S. 1630 responds to concerns of growth states and independent power producers that allowances might be hoarded by allowing EPA to withhold 2% of the allowances and sell them if necessary to new sources.

There are also three acid rain issues concerning S. 1630 that the Administration does not support. First, regarding clean coal technology incentives, S. 1630 failed to include several incentives the Administration believes are critical for encouraging such emerging technologies and realizing their associated energy, environmental and economic benefits. Second, S. 1630 includes a clean state provision that exempts the dirtiest units in so-called clean states from the acid rain provisions, resulting in significantly higher emissions increases in the west than are allowed by the President's proposal. Finally, S. 1630 changes the NOx control requirements contained in the President's program from a technology standard for existing boilers to an allowance system with tighter controls. This change increases the overall costs of the acid rain program, for relatively small incremental emission reductions. This change is the primary reason that the costs associated with the Senate bill acid rain program are about $400 million higher than those of the President's proposal.

TITLES IV AND VI - IMPLEMENTATION AND ENFORCEMENT TOOLS: Both S. 1630 and the President's Proposal contain provisions that establish necessary tools for enforcing and implementing the Clean Air Act Amendments. In both proposals, the permit program requires that major air pollution sources and certain other sources obtain operating permits. In addition both bills contain similar enforcement provisions, including, among others, criminal prosecution, citizen suits and administrative enforcement proceedings,. The Administration supports the permitting and enforcement provisions in S. 1630.

CFCs AND GLOBAL WARMING: S. 1630 adds provisions that are not in the President's proposal and which are aimed at addressing stratospheric ozone and global warming concerns, such as a requirement to control carbon dioxide emissions from auto tailpipes. The Administration does not support these provisions because unilateral action aimed at addressing a global problem is inappropriate to include in this bill. These proposed actions have been neither fully analyzed nor do they appear to be a particularly effective approach to such a geographically vast problem.

MUNICIPAL WASTE COMBUSTORS: The municipal waste combustor provisions in S. 1630 are extraneous, since EPA has recently proposed standards to address air emissions from both new and existing incinerators. In fact, the Administration believes that some aspects of the provisions in S. 1630 may be less

environmentally protective than the proposed EPA program.

CLEAN FUELS: S. 1630 contains no clean fuels program. The Administration strongly urges the Senate to include a clean fuels program such as that in the President's proposal. As the President has said before, it is much more cost effective and technically feasible to implement a clean car program integrating clean fuels than to continue to depend only on vehicle controls. For decades we have reduced auto emissions by changing vehicle technology; it now time to view the fuel as an equal partner in gaining potential emission reductions.

II. CRITIQUE OF S. 1630

A. Urban Air Quality

1. Background

The central focus of the original Clean Air Act is to protect public health and welfare by attaining and maintaining the National Ambient Air Quality Standards (NAAQS). Under the Act's framework, EPA sets national air quality standards and provides states with guidance on how to achieve the standards, while the states are primarily responsible for managing air quality through the development and execution of State Implementation Plans (SIPs). EPA has established NAAQS for six pollutants, and the state/Federal air quality management system has successfully reduced SO2 and lead concentrations and made substantial progress reducing emissions related to all six NAAQS pollutants. Nevertheless, for a variety of reasons, progress in recent years has been limited, and nonattainment problems persist for ozone, carbon monoxide (CO), and particulate matter (PM-10).

Today, there is a general consensus that the attainment deadlines, Federal requirements, and planning mechanisms contained in the 1977 statute need to be revised if the ultimate goal of healthy air quality is to be achieved. In view of the need for a significant revision to the 1977 Clean Air Act, the Administration has developed a coherent, balanced strategy for addressing urban air quality. This approach is founded on the following principles:

(1) Striking an appropriate balance between state and Federal roles: The Federal government can support state and local governments in developing strategies to control industrial and other stationary air pollution sources. The Federal government is also well positioned to develop national standards for automobiles and clean fuels programs. States, on the other hand, need the flexibility to select appropriate measures adapted to unique air pollution situations.

(2) Promoting cost/effective controls: Measures for controlling air pollution can vary substantially in cost. The Administration program offers pollution reductions that are very similar to the S. 1630 at a substantially lower cost.

(3) Controlling air pollution sources, tailoring compliance and attainment deadlines and planning and progress requirements to the problem: The ozone, CO and PM-10 provisions call for the development of air quality inventories that are necessary tools for creating air pollution control strategies. As with S. 1630, the

President's proposal provides longer deadlines and additional requirements for areas with more serious problems. However, embedded in the President's proposal is more flexibility that we believe is needed for carrying out the goals of the legislation so that solutions can be better adapted to unique local situations.

While S.1630 adopts an overall structure that appears similar to the Administration proposal, it differs in a number of ways that depart from the fundamental principles noted above.

2. Key Differences

The nonattainment provisions in the President's bill and in S. 1630 contain differences in ten key areas. These areas are:

- o specific control program characteristics
- o attainment status designations
- o air quality classifications and attainment deadlines
- o sanctions
- o federal implementation plans
- o interstate ozone transport
- o mandatory federal measures
- o PM-10 control
- o netting requirement
- o major stationary source definition

a. Specific Control Program Characteristics

FEES: Besides establishing attainment deadlines, the classification schemes specify the control measures and other planning requirements that various nonattainment areas must implement. Under S. 1630, all nonattainment areas would be required to implement programs to assess permit fees and annual emission fees for stationary sources and annual registration fees for automobiles. Such fees are unnecessary to promote control and are redundant with the operating permit fees included in the permit program.[3]

OFFSETS: Both proposals require new major VOC sources to obtain sufficient emission reductions from other sources to more than offset their increase in emissions. For almost all areas, S. 1630 specifies that offsets must occur at a ratio of 1.5 to 1 (compared to the emission increase). In the most polluted 9

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[3]. The fees contained in S. 1630 are: $25/ton of SO2 emitted by major sources, $75/ton emitted for major sources of PM-10, ozone precursors and CO located in nonattainment areas, plus a $15/ton Federal fee on major sources located in nonattainment areas. S. 1630 also includes a $2 fee for all cars registered in nonattainment areas. The President's proposed permit program includes a $25/ton fee for major sources in nonattainment areas, except CO sources and source emissions that exceed 4000 tons/year.

cities, the ratio is 2 to 1. This approach is inflexible, and virtually prohibits consideration of: 1) whether there are offsets available for trading in a particular area; 2) the size of offset ratio needed to address a local problem; and, 3) whether the problem is attributable to stationary sources (some nonattainment areas are primarily due to motor vehicle pollution.

PROGRESS REQUIREMENTS: The President's proposal recognizes that about a third of the nonattainment areas (marginal areas) are likely to attain the ozone standard without any additional control measures (i.e., through reductions from existing measures and the current Federal Motor Vehicle Control Program). The proposal therefore limits requirements for such areas to correcting existing measures (when necessary) and developing sound emission inventories to serve as the basis to evaluate and monitor future growth, but does not require adoption of new control measures .

Under the President's proposal, another third of the ozone areas (moderate and serious areas) must implement Stage II vapor controls and achieve a 15% reduction in VOC emission reductions by 1995, (averaging 3% per year). S. 1630 requires reductions of about 4% per year and the worst areas must also achieve similar NOx reductions. Beyond the year 2000, some of the more seriously polluted areas may have extreme difficulty achieving an annual 4% reduction as compared to the 3% per year in the Administration. Yet, unlike the President's proposal, S. 1630 does not provide a process for modifying the percent reduction requirement in those cases where it would cause severe economic or social disruption.

CONTROLS ON MAJOR STATIONARY CONTROLS: S. 1630 and the President's proposal both require states to implement reasonably available control technology (RACT). S. 1630 also requires states with higher ozone levels to apply this control technology to smaller VOC sources and to NOx sources. S. 1630's definition of "major" VOC sources adds greatly to the number of sources that are directly affected by permits, fees, and growth controls, without proportional emissions reductions. Additional NOx controls in some areas could be expensive and could be counter-productive, yet S. 1630 would not permit the flexibility to consider such cases.

b. <u>Attainment Status Designations</u> - Traditionally, states have reviewed air quality data and notified EPA which areas should be designated as not attaining air quality standards. This approach recognizes that the states are best suited to identify, characterize and report their air pollution problems to the overseeing Federal agency (EPA). S. 1630 seriously departs from this approach by giving the Administrator unilateral authority to make such designations. Under S. 1630, areas violating the ozone, CO, and PM-10 standards would be designated nonattainment as a

matter of law. The President's proposal, on the other hand, allows States to maintain their pre-eminent role in identifying, characterizing, and reporting air pollution problems while still giving the Administrator the final authority to approve or modify the submissions from the state.

S. 1630 also requires that ozone nonattainment areas be automatically expanded to encompass multi-county metropolitan statistical areas (MSAs or CMSAs). The President's proposal, echoing the underlying principles it is founded upon, allows each state to determine what the boundaries of the nonattainment area should be, while retaining the Administrator's final authority to approve or modify the submission from the state. This approach recognizes the importance of each state's understanding of its own air pollution problems, allowing the states to retain their pre-eminent role in identifying and characterizing the best approaches to cleaning the air. The Administration believes this philosophy is essential for effective air pollution control.

c. Air Quality Classifications and Attainment Deadlines - S. 1630 establishes four ozone nonattainment classifications and two CO classifications. Although the President's proposal contains the same number of classifications, they are based on different air quality "thresholds". For ozone, S. 1630 thresholds generally create an "extreme" class for Los Angeles, a "severe" class for 8 areas with high ozone levels, a serious class for about 3 areas, and one large class (over 60 areas) with the lowest ozone levels. The broad ranges used in making the classifications for areas with lower concentrations result in areas with significantly different pollution levels being grouped together and may result in over-control. The President's proposal more evenly groups areas by establishing narrower design value ranges. The "worst" (severe) group in the Administration position contains four urban areas, (Los Angeles, New York, Houston, and Chicago), while the other three groups contain about 30 areas each.

d. Sanctions - While both bills provide for sanctions to be used when necessary to encourage appropriate state efforts to develop and implement pollution control strategies, S. 1630 allows essentially no discretion in applying such sanctions. Instead, all sanctions must be imposed when states fail to satisfy a requirement, regardless of whether reasonable efforts are being made by the state to address a nonattainment problem. The Administration strongly believes EPA should be able to consider whether a state is making a reasonable effort to correct its failure before deciding whether and which sanctions should be imposed.

e. Federal Implementation Plans (FIPs) - FIPs are air pollution control plans, similar to those that states must develop and submit to EPA, that contain a complete demonstration of attainment and all the control measures needed to attain the applicable air quality standard. S. 1630 requires EPA to develop and implement a FIP in lieu of a state prepared and managed SIP if sanctions have not caused the state to submit an approvable plan. While the President's proposal recognizes that a FIP (or partial FIP) may eventually be needed, it also provides the Administrator needed authority and flexibility to determine when the FIP would best satisfy the goals of the Act, after considering the nature of the state failure, the feasibility of Federal measures, and the magnitude of the nonattainment problem.

f. Ozone transport - Both proposals contain provisions that recognize the importance of interstate ozone transport, and thus the need for Regional Transport Commissions to assess problems and develop strategies. However, despite recent scientific evidence that region-wide control of VOC emissions in attainment areas may be of limited value, S. 1630 presumes the need for certain measures (I/M and RACT) throughout the region before further evaluation of the problem and other strategies. S. 1630 also provides the Regional Transport Commissions with the authority to unilaterally impose controls on sources, based on Commission findings. The Administration believes the Commissions are best suited to make recommendations on additional needed controls, leaving the final decision on control strategies to EPA. The S. 1630 provision is likely to lead to costly over-control in some areas with no environmental benefit.

g. Federal measures - Both bills require EPA to provide Congress with a report on the emissions and control of consumer and commercial products, but only S. 1630 mandates that regulations be subsequently developed. The President's proposal allows EPA to regulate these emissions to support efforts to attain air quality standards only after studying the feasibility of such a strategy. The Administration believes it is neither good public policy nor cost-effective to assume that certain reductions can be achieved from a previously uncontrolled source, like consumer and commercial products, without first studying the control methods and reduction efficiencies.

h. Particulate Matter (PM-10) - Both the President's proposal and S. 1630 allow deadline extensions for PM-10 areas that cannot meet the standards in the next several years. In this event, such areas would be required to adopt reasonably available control measures (RACM) for urban fugitive dust, woodsmoke and prescribed fires. Both bills also give extensions to areas with PM-10 problems dominated by natural fugitive dust emissions. S. 1630

requires each SIP to include a program for collecting a $75/ton emission fee from major sources of PM-10 "precursor" pollutants, as well as direct PM-10 emissions. "Precursors" are gases such as SO2, NOx, ammonia and VOC that can be transformed into particles in the atmosphere. The relative contribution of such pollutants to air quality problems varies substantially by area. The S. 1630 provisions could result in a large number of sources with little or no contribution to PM-10 problems paying such fees.

i. Netting Requirements - S. 1630 would change the netting requirements by disallowing the present use of the "plantwide" definition in determining whether or not a source is subject to new source review permit requirments. .

The present definition in EPA's regulations is a "plantwide" definition. Under this definition the entire facility is viewed as the air pollution source when determining whether a modification to operations at the source will cause a significant emissions increase, and thus whether the modification will be subject to review under the New Source Review program. The plantwide definition provides flexibility to a source owner in modifying plant operations or processes without requiring the source to undergo full regulatory review, as long as emissions from the plant do not increase. This definition was upheld in the United States Supreme court in the case of Chevron v. Natural Resources Defense Council (467 U.S. 837 (1984).

Overruling this definition would require each change to a facility to be reviewed separately from the overall operation of the facility, and subject it to full review and additional regulatory requirements even if the emissions from the facility as a whole remain unchanged, or decrease. This modification would therefore hinder the ability of a source to "net out" or remain beneath emission thresholds that trigger the Act's permitting requirements. The result of this change will be unnecessary costs, paperwork, and delay in new projects, with little or no environmental benefitThe Administration views this approach as unnecessarily restrictive and burdensome, and not likely to produce significant emission reductions, merely more paperwork

j. Major Stationary Source Definition - S. 1630 would modify the definition of major stationary source from that contained in the current law. By redefining major stationary sources as those with emissions of at least 25 tons per year, S. 1630 will increase the number of sources subject to new source review permit and control technology requirements. The Act currently defines major sources as those with emissions of at least 100 tons per year. The President's proposal preserves this definition. This change will result in unnecessaty costs, with little environmental benefit, since, in the aggregate, emissions from the additional sources that

would be subject to review and control are small.

B. Motor Vehicles

1. Background

While motor vehicles being built today emit much less air pollution (60% to 80% less, depending on the pollutant) than those built in the 1960s, cars and trucks still account for almost half the emissions of the ozone precursors VOCs and NOx, and up to 90% of the CO emissions in urban areas. The principal reason for this problem, one which the authors of the current Clean Air Act did not anticipate, is that there has been rapid growth in the number of vehicles on the roadways and the total miles they travel. This growth has offset a large portion of the emission reductions gained from vehicle controls. In addition to contributing to the problem of ozone and CO nonattainment, motor vehicles account for a substantial fraction of the emissions of toxic air pollutants, such as benzene, gasoline vapors and diesel exhaust.

In view of the unforeseen growth in automobile emissions in urban areas combined with the serious air pollution problems in many urban areas, the Administration decided that its clean air proposal must contain not only stricter traditional controls on mobile air pollution sources, but an innovative and far reaching program, the clean fuels program; one designed to provide a long-term reconciliation of the environment and automobile so that Americans can continue to enjoy the freedom of their own cars and clean air.

With some notable exceptions: particularly the lack of a clean fuels program and significantly higher overall compliance costs, the motor vehicle provisions contained in S. 1630 are similar in concept to those in the Administration's proposal. As becomes evident from the discussion below, the key reason for the higher costs associated with S. 1630 is that the Senate has made some of the provisions in its bill apply more broadly than those contained in the Administrations proposal. These variations from the Administration's proposal are not supportable because they require controls where they are not needed and in ways that are more expensive. As a result, they are not the most cost-effective for achieving the goal of cleaning the air.

The conceptual similarities between the two proposals are worth noting prior to discussing key differences. First, by requiring further reductions in the volatility (rate of evaporation) of gasoline nationwide, implementing wintertime programs to use lower CO emitting fuels, and calling for a reduction in the amount of sulfur in diesel fuel, S. 1630 reflects agreement with the Administration that cleaner fuels will greatly reduce emissions from the existing fleet.

Second, both bills require additional controls on the vehicle itself. These include more stringent tailpipe standards to control exhaust pollutants, improvements in the controls of evaporative emissions from vehicles, a new standard to control CO emissions at cold temperatures and the installation of self-diagnostic equipment on vehicles to monitor the functions of critical emission control equipment and alert the driver of the need for repairs when a problem occurs.

Finally, both bills recognize the benefits that can be achieved by requiring periodic emissions inspections of on-road vehicles so both require certain states to enhance Inspection/Maintenance (I/M) programs. Although their approaches are different, both proposals require the control of gasoline vapors that escape during vehicle refueling. Also, both bills give EPA new authority to regulate emissions from non-road engines and fuels. The similarities reflect the consensus opinion that total vehicle miles travelled in the U. S. will continue to grow at a fairly constant rate and, therefore, further improvements must be obtained from the traditional motor vehicle control programs.

2. Key Differences

The most significant and objectionable difference between S. 1630 and the Administration proposal is that S. 1630 does not include a clean fuels program. The other key differences between the mobile source provisions of the proposals, ones which alter the scope of coverage thus raising the costs of S. 1630 and which the Administration objects to, are as follows.

a. Tailpipe Standards

An important difference between the Senate and Administration proposals is their approach to long-term vehicle control measures, i.e., those which would take effect in the year 2000 and beyond. There are three basic options available to policymakers to achieve the vehicle-related VOC emissions reductions necessary to bring the nation's major urban areas into attainment with the health-based ozone standard.

The first option is to restrict automobile use in highly polluted areas. While small reductions may be obtained from transportation control measures, the reductions of 50% or more that would be necessary in certain cities are neither technically nor politically feasible.

The second option, embodied in the Administration's approach, would reconcile the car and the environment by introducing into the most polluted cities cars that can operate on fuels which are

inherently cleaner-burning than today's gasoline.

The third option is to require additional control equipment on cars through very stringent auto tailpipe standards. This is the approach taken by S. 1630 in that it establishes tailpipe standards for exhaust emissions of hydrocarbon (VOCs), CO and NOx that are 50% more stringent than the so-called Tier I standards that both proposals would impose on new cars in the mid-1990s. These Senate Tier II standards would be effective with the 2003 models, and would be required on all cars sold nationwide.

The President's approach achieves greater environmental benefits, focuses on the cities that need the most help, is implemented sooner, and costs less than the Senate's approach. In the Administration's view, the long-term program to further reduce auto emissions should require cleaner fuels, as well as cleaner cars. Therefore, its program requires the introduction of clean fuel cars in the nine most polluted cities, beginning in 1995. These cars would achieve the same emissions reductions as required by the Senate/Tier II cars but are built eight years earlier than would be required by the Senate. Further, The Administration would have a post-2000 clean fuel car that emits almost 70% fewer ozone-causing pollutants than the most stringently controlled Senate car.

The cost of Tier II nationwide Senate tailpipe controls is estimated to be about $500 per new car. Standard estimates of the price responsiveness of new car demand suggest that new car sales would fall by approximately 5 percent if this extra $500 per vehicle cost were passed through to retail car prices. This consumer response could have adverse environmental consequences in the years following the 2003 model year, since increased use could be made of older cars with significantly higher per mile emission factors. The Administration's cost are far lower (about $11 billion less annually, including costs associated with Senate bill motor vehicle provisions addressing air toxics) because the associated provisions allow the environmental benefits to be achieved through a combination of car and fuel technology.

Lastly, the President's program is targeted initially to the cities with the most severe smog problems. Other states or cities may opt into the program, at their discretion, if they believe the benefits are cost-effective. The Senate allows no such choices; all new cars must have costly control equipment while ignoring the major emission reduction potential of cleaner fuels.

b. Carbon Dioxide (CO2) Standard

S. 1630 would establish for the first time a standard limiting the amount of CO2 emissions from auto exhaust. Although CO2 is not harmful to health, it is a greenhouse gas which could cause global

warming. The Senate sets a two-step standard: beginning in 1996 new cars must on average meet a CO2 standard which corresponds to 33 miles per gallon (mpg) fuel efficiency, and beginning in 2000 the standard corresponds to 40 mpg.

The Administration opposes the inclusion of CO2 standards in the Clean Air Act amendments for three reasons. First, it is premature to mandate specific controls to address global warming. International studies are underway. International negotiations on a framework convention for global climate change are scheduled for this year and should be completed prior to unilateral U.S. action. Second, fuel economy requirements raise important non-environmental questions that need to be carefully considered, such as feasibility, cost and the competitiveness of the U.S. auto industry with foreign manufacturers. Finally, the entire set of proposed Clean Air Act Amendments covers many complex and controversial issues. To now include an auto control program aimed at reducing emissions of CO2 brings a host of new, equally complicated issues into the debate. The CO2 provision presents a real risk of overloading the proposals and preventing any legislative action on clean air.

c. Enhanced Inspection and Maintenance (I/M) Programs

There is a serious difference between the scope of the enhanced I/M programs embodied in the two proposals. While the Administration proposal contains a statutory requirement that serious and severe nonattainment areas enhance their existing I/M programs to make them more effective, S. 1630 would force at least 15 and perhaps as many as 34 areas to start entirely new I/M programs even though they probably do not need them. In addition, under S. 1630, 32 Northeast cities that presently are attaining the ozone standard would be required to start new I/M as part of the Northeast Ozone Transport Region requirements. Obviously, the cost differential between these varying approaches would be significant, with the Senate's approach costing significantly more than the Administration's approach.

d. Refueling Emissions

The Administration proposal and S. 1630 differ on the fundamental issue relating to refueling. While S. 1630 requires Stage II (at the pump) controls in all serious, severe and extreme ozone nonattainment areas (and in some moderate areas), it also mandates that, beginning with the 1993 models, "onboard" refueling controls must be installed on all cars. In addition, S. 1630 requires that Stage II be implemented statewide in the entire Northeast Transport Region.

The Administration believes it is appropriate to require Stage

II controls that are targeted to areas which need refueling emissions control.

C. Toxic Air Pollution

1. Background

Toxic air pollution can be defined as the air pollution that is hazardous to human health but is not covered under the ambient air quality programs in the Clean Air Act. These pollutants include carcinogens, mutagens, and reproductive toxins. The current Clean Air Act has hindered EPA's efforts reduce emissions of these threatening substances. As a result, the Agency has only been able to regulate eight pollutants out of many toxic pollutants being emitted.

The scope of the air pollution problem is widespread. Reporting by industry under the Superfund "Right to Know" rule (SARA Section 313) indicates that more than 2.7 billion pounds of toxic air pollutants are emitted annually. EPA studies of a limited number of air toxics indicate that exposure to air toxics may result in as many as 1000 to 3000 cancer deaths each year.

Why has the current program failed? The failure of the current air toxics program is fundamentally due to the health and risk-based approach of the existing Section 112. Risk estimates are expressed as the likelihood of an individual getting cancer or the number cancers in the exposed population. Risk assessment is a highly inexact science which is fraught with uncertainties. Standards promulgated by EPA for air toxics have been repeatedly challenged in court resulting in a paralysis of the regulatory program. For example, recent standards for benzene and radionuclides (both carcinogens) have taken over ten years to promulgate.

How are these problems addressed by the new legislation? Both S. 1630 and the Administration proposal employ a technology-based approach to reduce toxic air pollution. This means that sources of toxic air pollution would be identified and automatically required to apply the Maximum Achievable Control Technology (MACT). The level of control required would be based on the best control efficiency achieved by similar sources rather than the potential risk to public health. This approach has several key advantages. First, the emphasis is on control technology, not on uncertain and debatable risk estimates. Second, these regulations apply to entire categories of polluters (i.e., source categories) and thus would control all of the toxic pollution from these sources rather than only one pollutant. Third, risk would be evaluated in the second step of new approach. Although, a different strategy is used, both the Senate and Administration proposals would require a risk evaluation and perhaps further regulation subsequent to applying

the technology-based controls.

2. Key Differences

The following paragraphs provide some brief details on the specific provisions and implications of the Senate and Administration air toxics proposals. While these proposals are generally similar, there are a few important differences which are highlighted below. These differences result in Senate Bill costs of more than double those associated with the President's bill.

a. Residual Risk - The evaluation of the public health risk remaining after the application of technology based standards is very different under the Senate and the Administration proposals:

The Senate proposal would require that all sources meet a 1 in 1 million risk of cancer for the most exposed individual. Any source above this level could receive extensions of compliance date based on the magnitude of the risk estimate. For example, sources with risks above 1 in 10,000 after the application of technology based standards could receive a five year extension based on economic hardship. If the sources could not reduce the risk from its emissions to less than 1 in 10,000 after this extension period it would be forced to close. Sources with risks greater than 1 in 1 million but less than 1 in 10,000 after application of technology based standards would have to qualify for an extension every five years by demonstrating that it had applied all feasible control measures to try to achieve a 1 in 1 million risk level.

The Administration proposal also deals with the risk that would remain after the application of technology based controls. Instead of forcing compliance to some pre-determined "bright-line" risk number, the Administration proposal would determine whether the residual risks are "unreasonable" considering the magnitude of the health risks, costs and feasibility of control, and other relevant factors. Given the degree of uncertainty in risk estimates and the unique nature of each regulated industry, the discretion allowed in the Administration proposal is necessary for the reasonable implementation of this legislation. Without this discretion EPA would be forced to promulgate rules that may result in closure of large segments of industry.

b. Accidental Releases - Both the Senate and Administration proposals address the serious problem of accidental releases of toxic air pollutants. As with other key provisions, the major difference between the proposals is the degree of discretion allowed EPA in implementing the legislation. The Senate proposal requires regulations which may require that sources prepare risk management plans and submit them to the government; a requirement

that may impose unnecessary costs on sources. The Senate report also mandates specific chemical by chemical hazard assessments and automated leak detection systems; together estimated to add $2.5 billion annually to the proposal. Both proposals also include the establishment of an accidental release investigation board. Although in practice these bodies would likely function in much the same way, the Senate proposal would require that the Board be an independent organization. Creating an independent board adds another organization to an area already crowded with overlapping regulatory responsibilities and would likely be very costly.

c. Regulatory Agenda - Both the Senate and the Administration proposal have adopted the same list of hazardous air pollutants. Both proposals would require EPA to develop a list of source categories (industries) which emit one or more of the listed pollutants. This list of source categories would serve as the basis for the regulatory agenda. Source categories would be regulated in a priority based on their potential risk to public health.

The key difference between the two proposals is the number of the required regulations. The Senate proposal would require the regulation of 100% of the listed source categories within 10 years. The Administration proposal would also require all of the regulations to be in place within 10 years but allows discretion for the development of regulations for the lower, or least risky, 50% of the source categories. This discretion is essential for a reasonable implementation of this legislation. Without regulatory discretion EPA would likely spend considerable resources in developing regulations for source categories which may have found their way on to the list but do not warrant controls. EPA has estimated that this lower 50% of the source categories emits only 10%-20% of the risk from all major source air toxics. Use of the resources to develop standards for undeserving categories would reduce the resources available for the residual risk evaluation, and application of tighter controls on risky categories--those that pose a real health risk.

D. Acid Rain

1. Background

Acid rain occurs when sulfur dioxide and nitrogen oxide emissions are transformed in the atmosphere and return to the earth in rain, fog or snow. Approximately 20 million tons of SO2 are emitted annually in the U. S., mostly from the burning of fossil fuels by electric utilities. Acid rain damages lakes, forests and buildings, contributes to reduced visibility, and is suspected of damaging human health.

S. 1630 is very similar to the Administration proposal on the major issues of size of emissions reductions, timing, market-based approach, emissions offsets for new sources, and no explicit cost-sharing. In several areas the Committee strengthened the bill, however, in other areas the Administration does not support the Committee's modifications. The similarities include:

Size of SO2 emissions reduction - Both proposals call for a 10 million ton reduction below 1980 levels; both accept a 1.5 million ton reduction from industrial sources and the diesel desulfurization rule, and both require an 8.5 million ton reduction from utility sources (3.5 million in Phase 1 plus 5.0 million in Phase 2).

Timing - Administration proposal calls for a Phase 1 reduction by December 31, 1995, a Phase 2 reduction by December 31, 2000, with a 3 year extension for use of "repowering" technologies until December 31, 2003. The Senate bill has a Phase 1 date of January 1, 1995, and a Phase 2 date of January 1, 2000--both a year earlier, but a 4 year extension for "repowering" to December 31, 2003 -- the same final compliance date.

Market-based approach - Both proposals rely on the issuance of emission allowances for utility sources which can be bought and sold to allow companies to meet their emission limitations at the lowest possible cost. Such transfer would not require case-by-case approval by EPA, thus greatly facilitating emissions trading.

Sources affected in Phase 1 - Both proposals list and require 107 utility plants whose boilers are larger than 100 MW in size with 1985 emission rates greater than 2.5 lbs/mmBtu to receive allowances equal to 2.5 lbs/mmBtu times their average 1985-1987 fuel use.

Offsets for new plants - Both proposals would require new utility units to obtain allowances from existing or retired units in order to operate, thus retaining the 10 million ton emission reduction.

Cost sharing - Neither proposal contains taxes, emissions fees, nor direct subsidies for pollution control.

No mandated controls - Neither proposal requires that specific controls be used, leaving to companies the choice of fuel switching, control technology, conservation, etc.

2. Improvements

The Senate proposal corrects three problems acknowledged to exist in the Administration proposal. S. 1630 provides allowances for all clean (less than 1.2 lb/mmBtu) sources. The clean sources

are given allowances based on a 20 percent increase in fuel utilization over the 1985 levels thereby allowing growth in emissions at the cleanest units. Some very clean dual fired oil and gas units (less than 0.4 lbs/mmBtu) are given allowances up to the lesser of their permit levels or 0.4 lbs/mmBtu instead of tying them to actual 1985 levels which in some cases were as low as 0.01 lbs/mmBtu.

This modification solves two problems. It acknowledges the special needs of clean sources to have room to grow. Also, upon retirement of these sources, allowances become available for new sources, ensuring that a utility SO2 emission cap closer to the Administration goal of 8.9 million tons is maintained. (The Administration proposal inadvertently reduced the cap to 5.1 million tons)

The Senate proposal also responds to the concern of growth states and independent power producers that allowances will be "hoarded." Although we believe that the market is "thick", i.e. structurally and behaviorally competitive, we accept the desirability of this fix. The hoarding fix allows EPA to withhold 2% of the allowances and sell them for $1500 apiece if new sources cannot find them through the market. If no one comes to EPA to buy the allowances, they will be distributed to all companies they were withheld from.

3. Key Disagreements

The Senate makes a few additions and deletions relative to the Administration proposal that are not supported by the Administration.

Omission of most Clean Coal Technology (CCT) incentives - Although S. 1630 contains the time extension for repowering, it does not include several other CCT demonstration incentives that we believe are critical for encouraging these emerging technologies and realizing their energy, environmental, and economic benefits.

Clean States Provision - The S. 1630 has a "clean states" provision which exempts certain states from most of the provisions of the bill. The basis for the exemption is the amount of existing capacity that is scrubbed in states with total SO2 emissions below 150,000 tons per year. The exemption applies to the highest emitting sources in the state, as well as to the scrubbed units. Thus, it exempts the dirtiest units in the so-called clean states and results in significant emissions increases in the West relative to the Administration bill.

Increase in NOx reductions - The Senate proposal changes the NOx program from a technology standard for existing boilers which achieves a 2 million ton emission reduction from projected utility

emission levels (Administration proposal) to an allowance system with tighter controls that would achieve about a 2.3 million ton reduction from projected utility emission levels. The Senate's change increases the overall costs of the acid rain provisions by $400 million annually by 2005, and is therefore not supportable.

d. Federal Facilities - The Federal facility provision of S. 1630 requires federally owned facilities operating in affected utility service areas to install electric energy conservation improvements and to utilize renewable and alternative clean energy technologies to satisfy at least 10 percent of each facility's electricity needs. While the conservation requirement is burdensome, the renewable and alternative clean energy requirement could require the installation of new technologies at Federal facilities that would increase the current cost of electricity by several multiples. If Federal facilities could meet the 10 percent requirements by purchasing electricity from nonfossil sources, the requirement would shift nonfossil power from existing customers to Federal facilities and fossil capacity previously used by Federal facilities to nonfederal facilities. Little would be gained from this reshuffling of power usage, and it may not be feasible, given the integrated electricity grid from which most Federal facilities purchase electricity.

E. Implementation and Enforcement Tools

1. Background

S. 1630 and the Administration proposal contain provisions that establish the necessary tools for enforcing and implementing the Clean Air Act. Title V of S. 1630 requires that major sources of air pollution, and certain other sources of air pollution, obtain operating permits. These provisions are generally consistent with the Administration's proposed operating permit program.

Title VI of the S. 1630, containing enforcement provisions, is also generally consistent with the Administration's proposal. In conjunction with the enforcement advantages of the permit title, Title VI will significantly improve many different aspects of air enforcement. Notable among these are criminal prosecution, citizen suits and administrative enforcement proceedings.

2. Permits

a. The Permit Program - The essence of the permit program, which is contained in both proposals, is to require certain sources of pollution to operate under a permit that clearly sets out all of the source's pollution control obligations under the State implementation plan or other Clean Air Act requirements. This

program--in many ways, the most important procedural reform contained in either bill--will greatly strengthen enforcement of the Clean Air Act, as well as ease the administrative burdens that accompany efforts to change a source's pollution control requirements.

Under the S. 1630, states must submit operating permit programs, in accordance with EPA regulations, within three years of enactment. EPA may approve or disapprove the state program in whole or in part. Six months after EPA approves the state program, major sources must submit permit applications to the state. After providing notice to EPA and contiguous states, and allowing public comment, the state is to submit a proposed permit to EPA. EPA has 90 days to review the permit. If EPA takes no action, the permit will be issued to the source. If EPA objects, the state must revise the proposed permit, and if the state fails to do so, EPA must issue (or deny) the permit.

Once it is issued, the permit will be publicly available, and sources will be required to submit to the permitting authority reports concerning the extent of their compliance with their permit obligations. The permit may have a life of no longer than five years, after which it must be renewed.

Title V includes special provisions and grants EPA regulatory discretion in certain areas in order to ease administration of the permit system and provide protection against penalties for sources that properly submit permit applications and obtain permits.

b. Why the Permit Program Enhances Air Quality Control - Adding an operating permit program to the Clean Air Act makes the Act more consistent with other environmental statutes. The Clean Water Act, the Resource Conservation and Recovery Act, and the Federal Insecticide, Fungicide, and Rodenticide Act (as well as, to a more limited extent, the Toxic Substances Control Act) require permits. The Clean Air Act already requires a construction permit for certain sources of pollution, and about 35 States have their own laws that require operating permits for most sources as well.

The key improvements offered by the permit program are:

o The permit program will clarify and make more enforceable a source's pollution control requirements. Currently, a source's pollution control obligations may be scattered throughout numerous hard-to-find provisions of State and federal regulations, and in many cases, these provisions are ambiguous. In addition, in many cases, the source is not required under the SIP or other Clean Air Act provisions to submit periodic compliance reports to EPA or the States. The permit program will ensure that all of a source's obligations with respect to its pollutants will be contained in one permit

document, and that the source will file periodic reports identifying the extent to which it has complied with those obligations. Both the permit and the reports must be made publicly available.

o The permit program will simplify and shorten the procedures for changing the source's pollution control obligations. Currently, for sources subject to a SIP, any change in the source's pollution control obligations, no matter how minor, must be approved or disapproved by EPA through notice-and-comment rulemaking, a laborious and resource-intensive process that has led to unacceptably long delays in EPA action on SIP revisions. The permit program will end this problem for source-specific SIP revisions by placing a strict time limit--ninety days--on EPA's review. If, after this time, EPA takes no action, the revised permit will automatically be issued.

o The permit program will provide a ready vehicle for states to take over administration, subject to Federal oversight, of significant parts of the air toxics program and the acid deposition program.

o The permit program--through the permit fee provisions--will greatly augment a state's resources to administer pollution control programs by requiring sources of pollution to pay their fair share of the costs of a state's air pollution program.

The permit program will impose additional administrative requirements on the sources, states, and EPA. However, the bill provides EPA with flexibility to significantly reduce these burdens. Most importantly, EPA may develop streamlined procedures--which would eliminate most administrative concerns--for permitting sources when the permit simply reiterates existing SIP or other Clean Air Act requirements, or where the permit conforms to sample permits developed by EPA.

3. Enforcement

a. <u>The Enforcement Program</u> - The Administration's enforcement proposal is designed to update the Clean Air Act to include flexible enforcement authorities contained in other, more recently amended, environmental statutes. The proposals were developed over a period of several years based on ongoing enforcement experience with the Act and other environmental statutes.

The President's proposed amendments stem from four overriding policy concerns: a) interest in conforming clean air enforcement authorities to other environmental statutes; b) amendments to

address court decisions and legal issues which limit enforcement of the Clean Air Act; c) amendments to improve administrative enforcement authorities; and, d) amendments to clarify and confirm existing enforcement, and to correct technical problems with the Act. As a whole, the President's proposed amendments should ensure a substantially increased deterrent effect and consistency in implementation.

The amendments strengthen and clarify the Act's enforcement authorities in the following areas:

- o Enhanced criminal enforcement
- o Enhanced citizen suit enforcement (see below)
- o Enhanced administrative enforcement
- o amendments to address technical problems and court decisions

The S. 1630 enforcement provisions are generally consistent with the President's proposed provisions, and are therefore supported by the Administration.

b. Judicial Review and Citizen Suits

Amendments proposed in S. 1630 would make significant changes in the citizen suit and judicial review provisions of the Act. The Administration is concerned about the potential impacts these provisions could have on EPA's ability to carry out its missions under the Act. The changes would dramatically expand the jurisdiction of district courts and create overlaps with existing Courts of Appeals jurisdiction. By providing citizens with broadly expanded opportunities to judicially challenge agency action--even discretionary action--and providing district courts with the authority to compel nonmandatory actions, these provisions could deprive the Executive Branch of control over EPA's policy and regulatory agenda and require the transfer of scarce resources from enforcement to defensive litigation.

F. Major S. 1630 Additions

There are several provisions in S. 1630 that introduce entirely new air pollution control programs into the Clean Air Act amendments proposed by the President. These additional provisions are not supported by the Administration for reasons discussed below.

1. Proposed Provisions on CFCs and Global Warming

a. Stratospheric Ozone and Global Climate - S. 1630 contains provisions related to stratospheric ozone and global climate protection. While these sections have sought to build on the

structure and requirements currently contained in the Montreal Protocol, EPA believes that unilateral action would be inappropriate given the global nature of this problem. The Administration believes that stratospheric ozone and climate protection can best be addressed in the context of ongoing international negotiations. Unilateral actions, such as including requirements in the U. S. Clean Air Act Amendments, are not effective safeguards of the global environment and would unnecessarily punish national interests.

The process of strengthening the Montreal Protocol is well underway and should be allowed to run its course. Changes to the protocol are scheduled to be decided at the second meeting of the Parties which is scheduled for June 1990. Action prior to thiS, in the context of Clean Air Act amendments, would have almost no environmental benefit.

The Agency already has broad regulatory authority under Section 157(b) of the Clean Air Act to undertake many of the specific requirements (e.g. , recycling, product bans, labelling) contained in the bill. Several of these actions are currently under consideration by the Agency as discussed in an advance notice of proposed rulemaking (53 Federal Register 30604; August 12, 1988) as supplements to its current production-based regulatory system. Specific Congressional action is therefore unnecessary.

Part B of Title VII of S. 1630 requires information collection and reports to Congress concerning methane role as a greenhouse gas. Since analysis of methane emissions and controls are being conducted as part of the Intergovernmental Panel on Climate Change, this section of the bill is not necessary.

b. Carbon Dioxide Emissions from Cars - As discussed previously (Section 2.B), the Administration does not support the inclusion of carbon dioxide standards for auto emissions. The Agency is actively involved in international efforts to deal with the issue of global warming. As with the stratospheric ozone and global climate provisions included in S. 1630, the Administration believes that unilateral actions are not an effective means of safeguarding the global environment. In view of this, such provisions would unnecessarily punish national interests.

2. Municipal Waste Combustors (MWCs)

Since the Senate municipal waste combustor (MWC) provisions were originally introduced as S. 196, EPA has proposed standards to address air emissions from both new and existing incinerators. The S. 1630 MWC provisions are therefore extraneous. In fact, these provisions may be less environmentally protective than the EPA proposed program, while also being more expensive.

For example, the EPA proposed program would require both new and existing facilities to burn only waste which has been reduced in weight 25% through separation of recoverable materials for recycling. Materials separation would be an ongoing program, but flexibility is incorporated to accommodate fluctuations in market conditions.

S. 1630's recycling requirement is a one-time, preconstruction test applied only to new sources. Since the requirement only becomes effective 3 years after enactment, the substantial amount of new incinerator capacity coming on line in the next few years would be entirely exempt. In addition, the one-time nature of the recycling certification means the feasible recycling level will be determined based on a snapshot of market conditions. This may lead to substantial underestimation of the potential for recycling over the life of the incinerator.

The S. 1630 provisions also require installation of acid gas scrubbers on all facilities, regardless of size, type, remaining service life, or other factors which may affect the reasonableness of such large capital expenditures.

G. Major S. 1630 Omissions

Clean Fuels

The Administration is working to include a specific clean motor vehicle fuels program in the Senate bill. The Administration believes it is much more cost effective and technically feasible to implement a modest clean fuels program in the cities that need it the most, such as that proposed by the President, than to continue to establish more stringent nationwide car tailpipe standards. The President's program would introduce clean fueled vehicles beginning in 1995 into the cities with the worst air quality.

There are several vehicle fuels that are inherently cleaner than current gasoline, such as ethanol, methanol, natural gas, propane, and electricity and, possibly, reformulated gasoline. EPA projects that these fuels could provide approximately an 80 percent or greater reduction in ozone-forming emissions relative to a gasoline vehicle meeting the stringent 1993 emission standards proposed in the Administration bill. These fuels would also provide large reductions in cancer incidence from toxic air emissions, on the order of 90 percent or more relative to 1993 gasoline vehicles.

Clean Air Act Amendments

Cost Comparisons

January 23, 1990

Office of Air and Radiation
United States Environmental Protection Agency

Clean Air Act Amendments

Cost Comparisons

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Clean Air Act Amendments

Cost Comparisons

EXECUTIVE SUMMARY

Last June, President Bush announced a comprehensive proposed set of amendments to the current Clean Air Act. The goal of this legislation is simple -- to secure the right of all Americans to breathe clean air and live in a cleaner environment. Moreover, by utilizing innovative and cost effective pollution control and prevention practices, the President's proposal protects our public and environmental health without hindering our nation's economic viability.

Both the House and the Senate have proposed similar bills to amend the Clean Air Act. This executive summary compares the economic costs of the Administration's original proposal, the House amendments to that original proposal (H.R. 3030 as reported), and the current Senate proposal (S. 1630).

All three proposals seek common environmental goals; curbing acid rain, improving urban air quality, and reducing toxic air emissions. These goals are achieved in different ways however -- differences that will greatly affect the overall cost of clean air. By restricting the discretion of EPA to implement the new clean air provisions and by using federal mandates rather than local solutions, H.R. 3030, and to a much greater degree the Senate bill, result in higher costs with little additional environmental benefits.

As introduced, the President's original set of amendments is estimated to cost $18.9 billion annually in the year 2005. H.R. 3030 as reported would cost $22.2 billion and the Senate proposal would cost $41.9 billion by the year 2005, or more than double the cost of the original Administration bill. The relative magnitudes of the costs are similar in the early years after implementation. The original Administration bill is estimated to cost $6.8 billion in 1995, H.R. 3030 (as reported) $8.0 billion, and S. 1630 $12.0 billion annually by 1995.

Each title of the proposed bills has important differences that result in substantial cost differences. The overall cost of nonattainment provisions of the Senate bill are more than $11 billion more than the Administration nonattainment provisions. The majority of this difference (over $7 billion) is due to the tighter automotive tailpipe emission standards in S. 1630. This $7 billion dollar increased cost accounts for minor improvements (1-2%) in volatile organic chemical (VOC) reductions over the provisions of the Administration and House bills.

In the air toxics title, the Senate's residual risk requirement is estimated to cost approximately $4.5 billion more than the Administration or House bills. These costs are due largely to the potential closure of industrial sources unable to meet the nondiscretionary "bright line" 1×10^{-4} provision of the Senate bill. (Any source that imposes a cancer risk greater than 1 in 10,000 to the "maximum exposed individual" would be required to shut down.) In addition, the more stringent leak detection and accidental release provisions of S. 1630 are expected to cost approximately $2.5 billion more than either the Administration or House bill.

In the acid deposition provisions, the Senate bill is expected to cost approximately $400 million more annually and result in relatively little additional reductions of NOx and SO2.

In addition to these differences in specific provisions, the Senate bill adds important provisions that are not contained in the Administration or the House bill. These additional provisions will increase the cost of the Senate bill beyond the current estimate. Some of the major additions to the Senate bill (for which costs have not been estimated) include:

- The carbon dioxide motor vehicle standards will in effect increase the required motor vehicle mileage standards to 33 miles per gallon by 1996 and 40 mpg by the year 2000. The additional per-vehicle technology costs, possible losses in safety, performance and other attributes valued by the car-buying public and the potentially disruptive effect on the competitiveness of the U.S. automotive industry are not considered in the overall Senate bill costs.

- The costs of phasing out the production and use of ozone depleting chlorofluorocarbons, halons, and carbon tetrachloride according to the schedule in the Senate bill will exceed those expected as a result of the current Montreal Protocol. These costs are not included in the overall Senate estimate.

- The Senate acid deposition provisions require federally-owned facilities to obtain 10% of their electricity supply from alternative clean sources. To the extent that these alternative sources are costlier than current sources, the cost of electricity to these facilities will be increased. These costs are not reflected in the acid deposition costs of the Senate bill.

- Significant Great Lakes and coastal waters air toxic monitoring networks and research programs are required in the Senate bill. The costs of these provisions have not been estimated or included.

- The municipal waste combustor provisions of the Senate bill would impose more stringent controls on very small waste combustors compared to the proposed EPA regulations. These costs are not included in the analysis.

- The cost of the Senate bill does not reflect any additional costs for transportation control measures in the Senate bill. For example, employers that are not able to reduce the average number of passengers per car would be required to pay a monthly fee.

In sum, either by addition of provisions beyond the scope of the President's original set of Clean Air Act provisions or by omission of provisions designed to attain environmental benefits in the most cost-effective manner, S. 1630 and to a lesser extent H.R. 3030 (as reported) result in a higher price tag for clean air. With overall costs for clean air in the billions, rather than millions of dollars, these cost differences could have a significant impact on the nation's economic health without providing substantial additional environmental benefit.

The remainder of this report compares the costs of parallel provisions included within each bill and discusses important differences between each title. All cost estimates included should be considered preliminary and could change pending additional analysis or changes to the provisions analyzed.

CLEAN AIR ACT AMENDMENTS

ANNUAL COST COMPARISON
(million $)

	1995			2005		
	Administration[1]	House (H.R. 3030)[2]	Senate (S.1630)	Administration	House (H.R. 3030)	Senate (S. 1630)
NONATTAINMENT	*5,400*	*6,600*	*8,500*	*10,100*	*11,900*	*23,200*
ACID RAIN	*400*	*400*	*300*	*4,100*	*4,100*	*4,500*
AIR TOXICS	*1,000*	*1,000*	*3,200*	*4,700*	*6,200*	*14,200*
TOTAL ANNUAL COSTS ("best" estimate)	$6,800	$8,000	$12,000	$18,900	$22,200	$41,900

[1] As transmitted by the President.

[2] Administration bill as amended in Health and Environment Subcommittee.

CLEAN AIR ACT AMENDMENTS

ANNUAL COST COMPARISON
(million $)

	1995			2005		
	Administration[1]	House (H.R. 3030)[2]	Senate (S.1630)	Administration	House (H.R. 3030)	Senate (S. 1630)
NONATTAINMENT	***5,400***	***6,600***	***8,500***	***10,100***	***11,900***	***23,200***
Stationary	2,207	2,207	2,707	2,350	2,350	2,920
Motor Vehicles/Fuels[A]	1,635	2,685	3,376	1,691	3,494	11,413
Area Specific[B]	542	732	1,306	589	799	1,244
Progress Requirements	680	656	369	5,150	4,940	7,000
Fees	300	300	755	300	300	600
ACID RAIN[C]	***400***	***400***	***300***	***4,100***	***4,100***	***4,500***
AIR TOXICS	***1,000***	***1,000***	***3,200***	***4,700***	***6,200***	***14,200***
Phase I MACT[D]	1,010	1,010	2,603	3,145	3,145	4,141
Mobile Sources	0	0	0	0	1,505	1,500
Accidental, Monitoring & Leak Detection	0	0	591	84	84	2,591
Residual Risk[E]						
Unreasonable Risk	0	0	0	1,500	1,500	---
$1x10^{-4}$ & $1x10^{-6}$ Risk	0	0	0	---	---	6,000
TOTAL ANNUAL COSTS ("best" estimate)	**$6,800**	**$8,000**	**$12,000**	**$18,900**	**$22,200**	**$41,900**

[See following pages for Notes A-E]

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[1] As transmitted by the President.

[2] Administration bill as amended in Health and Environment Subcommittee.

Additional Notes for Cost Comparison Table

Nonattainment Cost Notes

A.1 The EPA-estimated cost increase for the full set of Phase 2 standards in the Senate bill represents about 5 percent of the average purchase price of a car. Economists generally agree that in the short term this will reduce new car sales by about 5 percent from whatever they would otherwise be. The transportation services that would have been provided by these lost units will be made up via older cars being kept in service longer and used more intensively. The reduction in emissions benefits from tailpipe hydrocarbon controls and the increased progress requirement reductions reflect this price effect.

A.2 The tailpipe standard cost for the original Administration bill does not reflect possible savings from permitting averaging across models. The original Administration bill would permit averaging only under conditions that preserve the emission reductions otherwise achieved by applicable standards. EPA believes that even with this constraint, averaging might provide industry and consumers with significant savings and/or more product choice. It can allow manufacturers to avoid high per vehicle development and hardware costs on low-volume or difficult-to-control models by substituting extra reductions from models with more emissions payback per dollar spent. It can also allow new model production to start on schedule despite delays in achieving full compliance. The standards proposed by the Administration are feasible with known technology for all models, and EPA would expect that averaging would be used only sparingly, with moderate cost savings overall but significant savings for a fraction of customers. If, for example, averaging saved one-half the cost of control on 10 percent of production, the overall cost of the tailpipe standards would be reduced 5 percent.

B. The Senate bill lowers the ton per year cutoff to 25 tpy in long-term nonattainment areas and 10 tpy in Los Angelas for reasonably available control technology (RACT). This provision will automatically subject these smaller sources to controls. In the Administration bill, local areas retain the discretion to regulate such sources as deemed necessary to meet the progress requirements. Any additional costs of the less flexible Senate RACT standards are not reflected in the area source cost estimates.

Acid Rain Cost Notes

C.1 The present value of the cost of the Administration proposal is $13 - $18 billion (1988$). The present value of the Senate bill is $14 - $22 billion. The $1 - $4 billion dollar additional cost of the Senate bill is due to the additional NOx requirements and the one year earlier starting date of each phase of reductions.

C.2 S. 1630 contains additional requirements for federally owned facilities as part of the Title IV Acid Deposition Control provisions. Sec. 403 requires federally owned facilities operating in affected utility service areas to install cost effective energy conservation improvements and to utilize renewable and alternative clean energy technologies to satisfy at least 10 percent of each facility's electricity needs.

The requirement to transfer 10% of the electricity demand of these facilities to clean alternative sources could greatly increase the cost of electricity if the price of the clean substitute was more than current supply. Moreover, this requirement may only result in a reshuffling of power usage, resulting in no net environmental benefit. By requiring facilities to purchase electricity from nonfossil sources for example, the requirement would shift nonfossil power from existing customers to federal facilities and fossil capacity previously used by federal facilities to nonfederal facilities.

Air Toxics Cost Notes

D. Part of the Phase I MACT technology costs include costs for controlling toxics from electric utility boilers. EPA's detailed air toxics cost analysis indicates that boiler control costs could range from $750 million to $2.6 billion in the year 2003. This range of control costs does not include the use of scrubbers which may be necessary in some cases to control emissions of acid gaseous emissions (e.g. fluorides, chlorine, formaldehyde). If such gaseous emissions were considered in the analysis, an estimated 230 additional coal-fired generating plants would exceed the major source trigger criteria. Adding scrubbers to these boilers would cost approximately $7.3 billion annually. The control of acid gas emissions and the interplay between the air toxics and acid rain provisions of the various bills will both be elements of the utility boiler study required by the Administration bill.

E. The $6 billion dollar residual risk cost of the Senate bill includes both the potential costs of closure of the sources unable to meet the 1×10^{-4} "bright-line" risk goal as well as the costs sources are expected to incur costs in striving to meet the 1×10^{-6} Senate residual risk standard. Research on improved control technologies and implementation of better pollution management and control practices will impose costs on those sources who meet the 1×10^{-4} risk level but fall short of the 1×10^{-6} risk level.

The nationwide cost of this 1×10^{-6} residual risk requirement is difficult to estimate. In the most recent NESHAPS regulations promulgated by EPA for stationary sources of benzene, the incremental control costs of reducing risk from 1×10^{-4} to 1×10^{-6} totaled over $100 million annually for those sources <u>able</u> to meet the stricter standard. Similar or greater costs can be expected for other industrial sources required to meet the Senate's 1×10^{-6} residual risk requirement.

In addition to the economic costs of potential industrial source closure resulting from the Senate's 1×10^{-4} risk standard, approximately 11,000 - 14,000 workers may lose their jobs.

DISCUSSION OF COST DIFFERENCES

I. Nonattainment

A. Ozone Nonattainment

By the year 2010, each bill results in attainment of the ozone ambient air standard in all areas in the nation. The Senate bill has earlier attainment deadlines than the Administration or House bill, resulting in greater overall costs. By the year 1995, the ozone attainment costs of the Senate bill are $700 million more than the original Administration bill. By 2000, ozone attainment costs are $1.1 billion more, and by 2005 they jump to over $10 billion more annually. The majority of this cost differential is due to the Senate proposal's Phase II automotive tailpipe standards which are estimate to add an additional $500 to the price of each car.

B. Carbon Monoxide Attainment

The more stringent oxygenated fuels provisions of the Senate bill are estimated to cost $320 million in 1995 compared to $117 for the original Administration bill.

II. Acid Rain

The Senate bill is estimated to cost approximately $400 million more than the Administration bill by the year 2005. Each bill achieves similar SO2 reductions (8.2 million tons from 1980 baseline by 2005 for the Administration bill and 8.6 million tons for the Senate bill). Each bill is estimated to result in approximately 2.1 million tons of NOx reductions. Although the NOx reduction requirements are greater in the Senate bill because the incremental reductions would be extremely expensive, the analysis indicates that utilities will comply by substituting SO_2 reductions for part of the NOx reduction requirement. This substitution effect accounts for the 400,000 ton increase in SO_2 reductions in the Senate bill.

The Administration and House bills have the same costs for acid rain control.

III. Air Toxics

In 1995 the Senate air toxics provision is estimated to cost $3.2 billion compared to $1.0 billion for the House and Administration bills. The increased cost is due to urban air toxics monitoring network costs not mandated in the

Administration bill and the earlier potential control of utility boilers. The Administration bill contains a provision to complete a study of the toxic emissions from utility boilers before regulation.

By 2005, the costs of the Senate bill ($14.2 billion) are over double the estimated cost of the amended Administration bill ($6.2 billion). This is due to accidental release and leak detection provisions more stringent than the Administration bill and the potential costs of closure of industrial sources that cannot meet the Senate's 1 x 10^{-4} "bright-line" residual risk standard.

The major difference between the original Administration and H.R. 3030 is H.R. 3030's more stringent mobile source air toxic requirements which result in an additional $1.5 billion cost -- primarily for the control of benzene.

IV. Additional Senate Provisions

A. Stratospheric Ozone and Global Climate: CFC Phaseout

Title VII of S. 1630, Stratospheric Ozone and Global Climate Protection, requires the scheduled phase out of production of listed CFCs, halons and other ozone depleters. The schedule would require a total ban of production by the year 2000, in contrast to the current international agreement (Montreal Protocol) which only freezes production in 1998 at half of the 1986 levels. In addition, the Senate bill does not provide the Administrator with discretion to consider the toxic potential of CFC substitutes.

The Administration proposal does not contain amendments to the Clean Air Act for the control of stratospheric ozone depletion. EPA and the Administration believe that multilateral negotiations and actions for such control should go forward as scheduled, rather than unilateral action. The process of strengthening the Montreal Protocol is well underway and should be allowed to run its course. Changes to the protocol are schedule to be decided at the second meeting of the of signatories which is scheduled for June 1990. In addition, the agency currently has broad regulatory authority to undertake many of the specific requirements contained in the Senate bill. Moreover, the Administration believes that complicating an already full and complex package of amendments at this stage of the legislative process may unnecessarily jeopardize passage of the bill.

B. Carbon Dioxide Emissions from Automobiles

In response to global warming concerns, S. 1630 requires new cars beginning in 1996 to meet a CO2 standard corresponding to a 33 miles per gallon fuel efficiency level, and beginning in 2000 the standard increases to about 40 miles per gallon.

The Administration and House bills do not contain such a standard and the Administration opposes its inclusion. Multilateral, rather than unilateral approaches, are needed to address global environmental issues such as global warming concerns. The proposed changes to fuel economy levels require detailed consideration of feasibility, cost, and impacts on safety, performance, and other attributes valued by the car buying public. Impacts on U.S. automotive industry competitiveness must also be considered. Finally, as with the addition of the CFC requirements, the inclusion of a CO2 standard into the ongoing amendment process injects a host of new complicated issues into the debate, seriously jeopardizing action on the already crowded clean air agenda.

NONATTAINMENT COST DETAILS

Nonattainment Costs

The following costs tables compare the costs of reducing VOC's for ozone nonattainment purposes for the years 1995, 2000, 2005, and 2010.

Measures analyzed in the tables are divided into five categories.

1. The base program and RVP I represent regulations and standards that are already in force and therefore will affect emissions regardless of how the Clean Air Act is amended. The major controls of the base program are full implementation of existing SIPs, the existing Federal Motor Vehicle Control Program (FMVCP), and new source controls. The cost of the base program and RVP are not included in the totals ascribed to each bill.

2. National stationary measures are those that affect all sources nationwide whether or not they are located in nonattainment areas.

3. Measures that affect motor vehicle emissions are listed as a group.

4. Area specific measures are those that, when mandated by a bill, are applied to a selected number of areas, whether it be all nonattainment areas or a subset of nonattainment areas. (Two of the motor vehicle measures, Stage II and alternative fuels, are also area specific measures).

5. Costs listed as progress requirements are those beyond the specific measures mandated by each bill, but that are necessary to meet interim emission reduction requirements or to attain the standard, whichever is binding. Identifiable controls (for which cost and emission reduction information is available) are applied first. The remainder of the progress requirements is made up of as yet unspecified "assumed" controls for which no specific cost data are available. Costs of assumed controls are estimated to range from $2,000 to $10,000 per ton with a best estimate of $5,000 per ton.

As indicated in the footnotes to Table 3, the percentage reduction is estimated based on what is expected to occur in ozone nonattainment areas. For most categories, the percentage reduction is calculated as the expected 1995 nonattainment area emissions for that category under the current EPA policy minus the modeled 1995 nonattainment area emissions divided by the 1987 nonattainment area total emissions. (For projection years other than 1995, the percentage reduction is calculated in the same way, with that year's emissions substituted into the above relationship.) For measures that are not applied to <u>all</u>

nonattainment areas, the percentage reduction is calculated by substituting into the above equation the emissions for the areas where the measure is applied. As an example, stage II refueling controls are only applied in moderate, serious, and severe nonattainment areas in the Administration bill, so the emissions in marginal nonattainment areas are excluded from the calculation for that measure.

In addition to the costs reflected in the tables for ozone nonattainment, each bill contains NOx mobile source costs for ozone attainment, and carbon monoxide attainment costs (oxygenated fuels and cold temperature CO control costs).

These costs are as follows:

NOx Motor Vehicle

Administration	1995 -- $ 380 million	2005 -- $ 415 million
H.R. 3030	1995 -- $1,387 million	2005 -- $1,741 million
S. 1630	1995 -- $1,568 million	2005 -- $2,395 million

Oxygenated Fuels

Administration	1995 -- $ 117 million	2005 -- $ 140 million
H.R. 3030	1995 -- $ 154 million	2005 -- $ 187 million
S. 1630	1995 -- $ 320 million	2005 -- $ 392 million

Cold Temperature Carbon Monoxide

Administration, H.R. 3030, and S. 1630 (costs same for all bills for Phase I standard)

1995 -- $108 million
2005 -- $128 million

In addition to these costs, the Senate provisions will result in additional control costs for the years 2000-2003, for the cost of equipment that must be installed on cars in certain areas prior to the installation of the control equipment required to meet the rest of the Senate bill's Phase II tailpipe standards in 2003.

Table 1
Comparison of Ozone Nonattainment Bills - 1995
(1/23/90)

Measure	Original Administration %VOC(3)	Original Administration Cost(2)	House H.R.3030 %VOC(3)	House H.R.3030 Cost(2)	Senate S.1630 %VOC(3)	Senate S.1630 Cost(2)
Base Program	15.3	-	15.3	-	15.3	-
RVP I	6.4	-	6.4	-	6.4	-
NATIONAL STATIONARY						
TSDF(1)	3.8	1,700	3.8	1,700	3.8	1,700
Municipal Landfills(1)	0.6	65	0.6	65	0.6	65
Cons./Comm. Solvents	0.9	400	0.9	400	2.1	900
Arch. Coatings	1.5	0	1.5	0	1.5	0
Marine Vessels	0.1	42	0.1	42	0.1	42
MOTOR VEHICLES/FUELS						
RVP II	7.5	240	7.5	240	7.5	240
Evap/Running Losses	0.8	60	0.8	60	0.8	60
Tailpipe/Useful Life	<0.1	460	<0.1	430	0.3	870
Refueling:						
Stage II and Onboard	1.3	120	1.3	76 to 236	1.3	130 to 290
Alternative Fuels	<0.1	150	<0.1	150	-	-
AREA SPECIFIC MEASURES						
RACT to 50 tpy	-	-	-	-	0.4	84
New CTG	2.9	400	4.1	590	4.4	480
Enhanced I&M	1.1	73	1.1	73	1.2	92
Basic I&M	-	69	-	69		
Ozone Transport Regions	*	*	*	*	-	250
PROGRESS REQUIREMENTS						
Identifiable Controls	**	130	**	36	**	79
Assumed Controls	**	550	**	620	**	290
NATIONAL TOTALS	42	4,500 (4,100 to 5,000)	43	4,700 (4,300 to 5,300)	46	5,400 (5,300 to 5,700)
RESIDUAL NONATTAINMENT AREAS	19		18		19	

(1) Measures EPA will implement under other legislation
(2) Millions of dollars
(3) Percentage reductions in VOC emissions are estimated from nonattainment area totals or as a percentage of 1987 emissions in the areas where those measures are scheduled to be applied.

* Bill requires assessment to determine nature and extent of controls needed for transport. Additional controls are likely, but estimates are not available.

** Percentage reductions for progress requirements are not shown because they apply only to a limited number of areas.

Table 2
Comparison of Ozone Nonattainment Bills - 2000
(1/23/90)

Measure	Original Administration %VOC(3)	Original Administration Cost(2)	House H.R.3030 %VOC(3)	House H.R.3030 Cost(2)	Senate S.1630 %VOC(3)	Senate S.1630 Cost(2)
Base Program	13.7	-	13.7	-	13.7	-
RVP I	6.7	-	6.7	-	6.7	-
NATIONAL STATIONARY						
TSDF(1)	3.9	1,800	3.9	1,800	3.9	1,800
Municipal Landfills(1)	0.6	67	0.6	67	0.6	67
Cons./Comm. Solvents	1.0	420	1.0	420	2.3	980
Arch. Coatings	1.5	0	1.5	0	1.5	0
Marine Vessels	0.1	47	0.1	47	0.1	47
MOTOR VEHICLES/FUELS						
RVP II	7.6	260	7.6	260	7.6	260
Evap/Running Losses	2.3	63	2.3	63	2.3	63
Tailpipe/Useful Life	0.4	480	0.4	570	0.9	910
Refueling:						
Stage II and Onboard	1.4	140	1.7	82 to 252	1.7	140 to 310
Alternative Fuels	0.2	0	0.2	300	-	-
AREA SPECIFIC MEASURES						
RACT to 50 tpy	-	-	-	-	0.4	84
New CTG	3.4	430	4.4	620	4.7	490
Enhanced I&M	1.1	80	1.1	80	1.2	100
Basic I&M	-	75	-	75		
Ozone Transport Regions	*	*	*	*	-	300
PROGRESS REQUIREMENTS						
Identifiable Controls	-	260	-	63	-	97
Assumed Controls	-	2,300	-	2,200	-	2,400
NATIONAL TOTALS	44	6,400 (5,000 to 8,600)	45	6,800 (5,500 to 9,000)	48	7,900 (6,500 to 10,300)
RESIDUAL NONATTAINMENT AREAS	4		4		4	

(1) Measures EPA will implement under other legislation
(2) Millions of dollars
(3) Percentage reductions in VOC emissions are estimated from nonattainment area totals or as a percentage of 1987 emissions in the areas where those measures are scheduled to be applied.

* Bill requires assessment to determine nature and extent of controls needed for transport. Additional controls are likely, but estimates are not available.

** Percentage reductions for progress requirements are not shown because they apply only to a limited number of areas.

Table 3
Comparison of Ozone Nonattainment Bills - 2005
(1/23/90)

Measure	Original Administration %VOC(3)	Original Administration Cost(2)	House H.R.3030 Phase I Only *** %VOC(3)	House H.R.3030 Phase I Only *** Cost(2)	Senate S.1630 %VOC(3)	Senate S.1630 Cost(2)
Base Program	8.6	-	8.6	-	8.6	-
RVP I	7.1	-	7.1	-	7.1	-
NATIONAL STATIONARY						
TSDF(1)	4.0	1,800	4.0	1,800	4.0	1,800
Municipal Landfills(1)	0.6	69	0.6	69	0.6	69
Cons./Comm. Solvents	1.0	430	1.0	430	2.4	1,000
Arch. Coatings	1.5	0	1.5	0	1.5	0
Marine Vessels	0.1	51	0.1	51	0.1	51
MOTOR VEHICLES/FUELS						
RVP II	8.2	280	8.2	280	8.2	280
Evap/Running Losses	3.5	68	3.5	68	3.5	68
Tailpipe/Useful Life	0.6	510	0.6	610	1.2	7,800
Refueling:						
Stage II and Onboard	1.5	150	2.0	90 to 270	1.9	160 to 340
Alternative Fuels	0.9	0	0.4	300	-	-
AREA SPECIFIC MEASURES						
RACT to 50 tpy	-	-	-	-	0.4	84
New CTG	3.4	420	4.6	630	4.9	520
Enhanced I&M	1.2	87	1.2	87	1.2	110
Basic I&M	-	82	-	82		
Ozone Transport Regions	*	*	*	*	-	330
PROGRESS REQUIREMENTS						
Identifiable Controls	-	280	-	70	-	100
Assumed Controls	-	4,900****	-	4,900****	-	7,000*****
NATIONAL TOTALS	42	9,100 (6,200 to 13,900)	43	9,600 (6,700 to 14,400)	46	19,600 (15,500 to 26,400)
RESIDUAL NONATTAINMENT AREAS		3		3		0

(1) Measures EPA will implement under other legislation
(2) Millions of dollars
(3) Percentage reductions in VOC emissions are estimated from nonattainment area totals or as a percentage of 1987 emissions in the areas where those measures are scheduled to be applied.

* Bill requires assessment to determine nature and extent of controls needed for transport. Additional controls are likely, but estimates are not available.

** Percentage reductions are not shown for progress requirements because they apply only in a limited number of areas.

*** Assumes only phase I tailpipe standards are implemented

**** If the 4 severe areas meet less stringent EKMA estimated reductions for attainment, costs decrease by $270 ($110 to $540)

***** If the 4 Administration bill severe areas meet less stringent EKMA estimated reductions for attainment, costs decrease by $2,700 ($1,100 to $5,400)

Table 4
Comparison of Ozone Nonattainment Bills - 2010
(1/23/90)

Measure	Original Administration %VOC(3)	Original Administration Cost(2)	House H.R.3030 Phase I Only *** %VOC(3)	House H.R.3030 Phase I Only *** Cost(2)	Senate S.1630 %VOC(3)	Senate S.1630 Cost(2)
Base Program	2.9	-	2.9	-	2.9	-
RVP I	7.7	-	7.7	-	7.7	-
NATIONAL STATIONARY						
TSDF(1)	4.0	1,900	4.0	1,900	4.0	1,900
Municipal Landfills(1)	0.6	71	0.6	71	0.6	71
Cons./Comm. Solvents	1.0	440	1.0	440	2.5	1,100
Arch. Coatings	1.6	0	1.6	0	1.6	0
Marine Vessels	0.1	55	0.1	55	0.1	55
MOTOR VEHICLES/FUELS						
RVP II	8.8	310	8.8	310	8.8	310
Evap/Running Losses	4.3	72	4.3	72	4.3	72
Tailpipe/Useful Life	0.8	540	0.8	650	2.9	8,800
Refueling:						
Stage II and Onboard	1.7	160	2.2	99 to 290	2.1	170 to 360
Alternative Fuels	1.4	0	0.6	300	-	-
AREA SPECIFIC MEASURES						
RACT to 50 tpy	-	-	-	-	0.4	84
New CTG	3.6	430	4.8	650	5.1	530
Enhanced I&M	1.3	94	1.3	94	1.3	120
Basic I&M	-	88	-	88		
Ozone Transport Regions	*	*	*	*	-	330
PROGRESS REQUIREMENTS						
Identifiable Controls	-	280	-	78	-	110
Assumed Controls	-	7,800****	-	7,900****	-	8,500*****
NATIONAL TOTALS	40	12,200 (7,600 to 20,100)	41	12,900 (8,200 to 20,800)	44	22,300 (17,300 to 30,900)
RESIDUAL NONATTAINMENT AREAS	0		0		0	

(1) Measures EPA will implement under other legislation
(2) Millions of dollars
(3) Percentage reductions in VOC emissions are estimated from nonattainment area totals or as a percentage of 1987 emissions in the areas where those measures are scheduled to be applied.

* Bill requires assessment to determine nature and extent of controls needed for transport. Additional controls are likely, but estimates are not available.

** Percentage reductions are not shown for progress requirements because they apply only in a limited number of areas.

*** Assumes only Phase I tailpipe standards are implemented

**** If the 4 severe areas meet less stringent EKMA estimated reductions for attainment, costs decrease by $1,900 ($770 to $3,800)

***** If the 4 Administration bill severe areas meet less stringent EKMA estimated reductions for attainment, costs decrease by $3,700 ($1,500 to $7,500)

ACID RAIN COMPARISON

ADDITIONAL ACID RAIN PROVISION AND COST COMPARISON

Low Base Case Flexible to High Base Case Flexible Scenarios

	1995		2005	
	Administration	Senate	Administration	Senate
Utility SO2 (millions tons reduced from 1980 baseline)	-4.1 to -2.8	-3.8 to -2.7	-8.6 to -8.2	-8.4 to -8.6
Utility NOx (millions tons)	-0.02	-0.1	-2.0 to -2.1	-2.1 to -2.1
Retrofit Scrubber Capacity (gigawatts)	+0.4 to +0.5	--	+15.0 to +22.0	+14.5 to +34.1
Coal Production (millions of tons)				
N. Appalachia	-16 to -23	-16 to -23	-37 to -35	-28 to -35
Midwest	-32 to -32	-27 to -29	-56 to -50	-55 to -49
C&S Appalachia	+33 to +41	+39 to +43	+59 to +46	+50 to +47
West	+10 to +11	+ 5 to + 7	+31 to +39	+29 to +34
Total U.S.	- 4 to - 3	0 to -2	- 3 to 0	- 4 to - 2

* The NOx reduction requirements are about 0.2 to 0.5 million tons greater in 2005 than in the Administration bill. This chart reflects the projections that utilities will comply by substituting SO2 reductions (at a 1.5 to 1 trading ratio) for part of the NOx reduction requirement.

AIR TOXICS COST DETAILS

UPDATED AIR TOXICS COST COMPARISON

Net Annualized Cost by 1995 (million 1989$)

PHASE I TECHNOLOGICAL CONTROL COSTS

Source Category	Administration[3]		S. 816	
	Range	Best Estimate	Range	Best Estimate
Major Stationary	505-1,364	935	505-1,365	935
Utility Boilers	0	0	750-2,585	1,668
Area Sources	30 - 119	75	0	0
Mobile Sources	0	0	0	0
MONITORING, ACCIDENTAL RELEASE, DETECTION				
Urban Monitoring	NA	0	87	87
Leak Detection	NA	0	0	0
Accidental Release	NA	0	336-672	504
RESIDUAL RISK COSTS				
Residual Risk	NA	0	NA	0
TOTAL - - - -	$535-$1,483	$1,010	$1,678-$4,709	$3,194

[3] Original Administration bill and House (H.R. 3030 as reported) have same 1995 costs.

UPDATED AIR TOXICS COST COMPARISON

Net Annualized Cost by 2003 (million 1989$)

PHASE I TECHNOLOGICAL CONTROL COSTS

Source Category	Administration[1]		S. 816	
	Range	Best Estimate	Range	Best Estimate
Major Stationary	805-3,388	2,097	882-3,468	2,175
Utility Boilers	0-2,585	750	750-2,585	1,668
Area Sources	120 - 475	298	120 - 475	298
Mobile Sources	0	0	0-3,000	1,500
MONITORING, ACCIDENTAL RELEASE, DETECTION				
Urban Monitoring	NA	0	87	87
Leak Detection	NA	0	2,000	2,000
Accidental Release	42 - 126	84	336-672	504
Subtotal - - - -	967-9,584	3,629	7,155-12,287	8,232
RESIDUAL RISK COSTS				
Unreasonable Risk	0 - 5,100	1,500	NA	
1 x 10-4 Bright-Line & 1 x 10-6 Risk Goal[2]	NA		5,100-6,900	6,000
TOTAL - - - -	$967-$14,684	$4,729	$12,255-$19,187	$14,232

[1] Administration bill as amended in the House (H.R. 3030) has an additional $1.505 billion for the control of mobile source toxics. H.R. 3030 as reported is estimated to cost $6.234 billion.

[2] See Residual Risk additional cost note E on page 8 above.

THE WHITE HOUSE

WASHINGTON

February 15, 1990

MEMORANDUM FOR THE FILE

FROM: JEFFREY R. HOLMSTEAD JRH
ASSISTANT COUNSEL TO THE PRESIDENT

SUBJECT: Review of Draft Clean Air Amendment Papers

I have reviewed above-referenced document, which will be used in on-going discussions regarding the President's proposed amendments to the Clean Air Act. No further action is necessary.

ID # _____ CU

WHITE HOUSE
CORRESPONDENCE TRACKING WORKSHEET

☐ O - OUTGOING
☐ H - INTERNAL
☐ I - INCOMING
Date Correspondence Received (YY/MM/DD) 1 1

Name of Correspondent: Tom Kiernan

☐ **MI Mail Report** **User Codes: (A)** _____ **(B)** _____ **(C)** _____

Subject: Review of DRAFT Clean Air Amendment Papers ① Administration Position on S.1630 ② Detailed Side-by-Side Analyses ③ "One-Pagers ④ Myths/Facts and ⑤ Cost Analyses

ROUTE TO:		ACTION		DISPOSITION		
Office/Agency	(Staff Name)	Action Code	Tracking Date YY/MM/DD	Type of Response	Code	Completion Date YY/MM/DD
	Cuddy	ORIGINATOR	90/01/12		_	1 1
		Referral Note:				
	Quat 17	A	90/01/12		S	90/01/19
		Referral Note:				
	Quat 02	A	1 1		_	1 1
		Referral Note:				
		_	1 1		_	1 1
		Referral Note:				
		_	1 1		_	1 1
		Referral Note:				

ACTION CODES:
A - Appropriate Action
C - Comment/Recommendation
D - Draft Response
F - Furnish Fact Sheet to be used as Enclosure
I - Info Copy Only/No Action Necessary
R - Direct Reply w/Copy
S - For Signature
X - Interim Reply

DISPOSITION CODES:
A - Answered
B - Non-Special Referral
C - Completed
S - Suspended

FOR OUTGOING CORRESPONDENCE:
Type of Response = Initials of Signer
Code = "A"
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Comments: _____

Keep this worksheet attached to the original incoming letter.
Send all routing updates to Central Reference (Room 75, OEOB).
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5/81

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

JAN 12 1990

OFFICE OF
AIR AND RADIATION

MEMORANDUM

SUBJECT: Review of DRAFT Clean Air Act Amendments Papers

FROM: Tom Kiernan
Office of Air and Radiation, EPA

TO: Distribution

Attached for your review and comment are packages of the following DRAFT documents:

1) Administration Report on S. 1630
2) Detailed Side-by-Side Analyses
3) "One-Pagers"
4) Myths/Facts
5) Cost Analysis

A meeting is scheduled for 6:00 p.m. Tuesday in Bob Grady's office to review this material. At that time, we would like to discuss the themes, tone and structure of the documents. We would also like to collect any of your detailed editorial comments on specific documents.

Again, given the draft nature of these documents, they should be considered preliminary and confidential. Thank you for quick turn around in reviewing the documents.

Distribution

Roger Porter
Boyden Gray
Linda Stuntz
Nancy Maloley
Bob Grady
Dave Gibbons
Dave Sloane
Gary Andres
John Schmitz
Dick Schmalenssee
Rob Fairweather
Howard Gruenspecht
Nick Calio

DRAFT

Administration Report

on

S. 1630
(as reported November 16, 1989)

January 12, 1990

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I. EXECUTIVE SUMMARY

A. The Issue

Last June, President Bush announced comprehensive proposed legislation to provide all Americans with clean air. On November 16, 1989 the Senate Environment and Public Works Committee reported S. 1630 to the full Senate for consideration. While there are many similarities between these two clean air legislative proposals, there are also some important differences; differences which the Administration does not support.

A key thematic distinction between the two proposals is the varied level of discretion that is afforded the Environmental Protection Agency. S. 1630 reflects a belief that the Bill's authors and federal agencies are best suited for understanding and solving complex air pollution problems around the nation. This is theme is present throughout S. 1630 where federal mandates, rather than discretion, are applied in cases where a state's air quality goals are not met and where EPA must adopt nationwide regulations, even when air quality problems the regulations are intended to address are not best solved with national measures. The President's proposal strikes a balance between discretion and mandates, reflecting a strong belief that solutions to many air quality problems must be customized, and that states, not the federal government, have the best customizing tools. Without this flexibility, combined with strong federal guidance and oversight, the solutions to air quality problems around the nation will be more costly and less effective,

B. The President's Proposal

The President's proposal, which offers the first comprehensive revisions to the Clean Air Act since 1977, is designed to curb three major threats to the nation's environment and to the health of millions of americans: acid rain, urban air pollution, and toxic air emissions. While emissions of some pollutants--such as lead and carbon monoxide--have been greatly reduced since the Clean Air Act was passed in 1970, progress has not come quickly enough for these others and much remains to be done.

The President's proposal, transmitted to Congress on July 21, 1989, contains four important underlying goals and the means for accomplishing them:

1. Protecting the public's health
2. Achieving early emissions reductions and maintaining steady progress
3. Harnessing the power of the marketplace
4. Employing innovative cost effective pollution control

technologies

The President's seven-title legislative proposal represents actions that the Administration believes will meet these goals. Enactment of the proposal would accelerate the pace of pollution reduction and put America on a path toward markedly cleaner air by the end of the century: acid rain pollutants would be reduced by nearly half, most urban areas in the country would finally attain national clean air standards, and toxic air pollutants would be slashed by tens of millions of pounds a year. The proposal also reflects a need to fix existing enforcement provisions and employ a new integrated permits program.

Acid Rain

As many are aware, acid rain occurs when sulfur dioxide and nitrogen oxide emissions are transformed in the atmosphere and return to the earth in rain, fog or snow. Approximately 20 million tons of SO2 are emitted annually in the U.S., mostly from the burning of fossil fuels by electric utilities. Acid rain damages lakes, forests and buildings, contributes to reduced visibility, and may cause thousands of premature deaths each year.

The purpose of the President's acid rain proposal is to achieve sulfur dioxide reductions of 10 million tons, relative to 1980 emission levels, to preserve those reductions, and to limit overall growth of NOx emissions. Emission reductions would be achieved in two phases--phase one reductions would be required after December 31, 1995 and phase II reductions would be required after December 31, 2000. The proposal also calls for a three-year extension of the Phase II deadline for plants adopting clean coal repowering technologies, combined with regulatory incentives designed to smooth their transition into the marketplace. The proposal calls for maximum flexibility in obtaining reductions.

The emission reductions under the acid rain title will be achieved using a market-based approach that allows utilities to use the least cost emission control methods. As one of the most important features of the President's bill, this market-based approach enables the U.S. to obtain environmental protection with flexibility and at the lowest possible costs.

Urban Air Quality

The President's proposal also addresses the urban air pollution problems of ozone (smog), carbon monoxide and particulate matter that have been most difficult to solve in recent years. Sources of these pollutants in urban areas are both numerous and diverse, with automobiles accounting for almost half the volatile organic compounds (VOCs), which are precursors to ozone pollution, half the air toxics, and some particulate matter. The health effects of urban air pollution, to which over 100 million Americans are presently exposed, include impaired breathing, heart diseases, permanent lung structure damage, increased susceptibility to lung

disease, and premature mortality.

The President's program employs an innovative, aggressive and balanced mix of federal measures and state initiatives to sharply cut air pollution in our Nation's cities. These measures include tougher automobile tailpipe and gasoline volatility standards, an emission reduction requirement to ensure a 3% average rate of reduction annually, and further controls on stationary air pollution sources. A cornerstone of the Plan is the clean fuels program, which will promote alternative fuels both to reduce pollution from cars, buses, trucks and motor fuels, and to harness the power of the marketplace to ensure cost-effective reductions.

Air Toxics

The continued growth of public concern about toxic air pollutants has motivated the President to propose a comprehensive plan for achieving significant reductions in emissions of hazardous air pollutants from major sources. 1987 industry reports suggest than an estimated 2.7 billion pounds of air toxics were emitted into the atmosphere, contributing to approximately 1500-3000 cancer fatalities annually. The President's program would reduce legal constraints preventing EPA from addressing this problem effectively and dramatically accelerate progress in controlling major toxic air pollutants. It mandates the application of the best technology available to cut air toxics. It promises progress in regulating sources of toxic air emissions on a set schedule. And it encourages voluntary reductions early by providing credit for those reductions against the best technology requirement.

C. S. 1630 CRITIQUE SUMMARY

S. 1630 contains many features similar to those in the President's proposal. However, there are a number of important differences between these clean air proposals, both obvious and subtle, that the Administration does not support. Some differences are significant in that they do not adhere to the underlying principles of the President's proposal. The major differences reflected in S. 1630 include potentially costly hard to implement changes to the urban air quality provisions, more stringent and technologically uncertain automobile tailpipe standards, a new CO2 automotive tailpipe standard and a higher level of regulation under the toxic air pollution program. One of the most objectionable differences is the Senate Committee's failure to include in S. 1630 the President's proposed clean alternative fuels program in S. 1630. These differences are summarized below. Please refer to Section II of this report for a more detailed discussion.

TITLE I - URBAN AIR QUALITY: While both S. 1630 and the President's proposal recognize today's general consensus that the attainment deadlines, federal requirements and planning mechanisms contained in the current clean air legislation need revising to

achieve air quality goals, they respond to this recognition differently. Regarding attainment status designations, S. 1630 departs from the traditional approach to such designations by specifying that areas violating air quality standards would be designed nonattainment as a matter of law. This approach departs from current practices by eliminating the pre-eminent role of the states in identifying, characterizing and reporting their air pollution problems; a sensible approach because it recognizes that states are best suited to identify, characterize and report air pollution problems. The President's proposal retains this preferable philosophy, while giving the Administrator the final authority to approve or modify the state submissions.

Regarding thresholds and attainment deadlines, the President's proposal and S. 1630 differ on "thresholds" or for determining which nonattainment areas will be required to impose what control requirements. S. 1630 contains broader classification ranges, which the Administration believes will likely result in over-control in areas with only marginal air pollution problems.

S. 1630 also contains a variety of control program provision, such as fees, progress requirements, attainment demonstrations, stationary source controls and transportation control measures, that are more stringent and less cost-effective than the President's proposal. Such provisions are not supported by the Administration because they mandate control programs which should be a menu from which states can select their best approach to meeting urban air quality goals.

Sanctions under S. 1630 are mandatory when a state fails to make the appropriate efforts to develop and implement pollution control strategies, regardless of whether a state is making all reasonable efforts to address an air pollution problem. The Administration believes this "mandate approach" is inappropriate because it does not accommodate sensible flexibility to evaluate the merits of applying sanctions to solve a particular problem. Reflecting this concern, the President's proposal allows EPA discretion when deciding whether sanctions are the best solution.

Federal discretion is also the heart of the differences between the Federal Implementation Plan (FIP) provisions of the two proposals. The S. 1630 FIP provisions require EPA to automatically develop and implement a FIP when sanctions have not worked to bring a state to demonstrate attainment of air quality standards. The Administration objects to this approach because it fails to offer the flexibility needed to determine whether a FIP would really be the best solution to the problem. There will be cases where a Federal plan simply can not satisfactorily complex local problems.

While both proposals recognize the problem of ozone transport in the Northeast by establishing a Northeast Ozone Transport Commission, S. 1630 presumes the need for expensive programs even

before the Commission evaluates the specific reasons for the problem. This is likely to lead to costly over-control in some areas with no environmental benefit.

TITLE II - MOTOR VEHICLES: Aside from omitting the alternative fuels program and the adding a requirement for EPA to develop a CO2 standard, which are discussed shortly, the S. 1630 mobile source provisions differ from the provisions in the President's proposal in three key areas. First, S. 1630 imposes very stringent automobile tailpipe standards for hydrocarbons, oxides of nitrogen and carbon monoxide. Although the President's proposal also tightens these standards, it does so to a lesser degree, mainly because of the greater, more cost-effective reductions anticipated from the clean fuels program. In the Administration's view, the tailpipe provisions in S. 1630 are not appropriate for four reasons: 1) they offer little environmental benefit; 2) they will be extremely costly; 3) they may not be technically achievable; and, 4) the benefits that do occur will not be nearly as high as those that will come from the alternative fuels program.

Second, there is a serious difference in the magnitude of the enhanced I/M programs contained in the two proposals. Adopting the philosophy that there are other, more cost-effective ways to address the urban air pollution problem, the President proposed simply that serious and severe nonattainment areas be required to enhance their existing I/M programs. S. 1630 leaps beyond this by making a costly proposal to require as many as 34 areas to implement entirely new I/M programs. The Administration opposes this because it applies in places where such programs are not needed.

Finally, S. 1630 and the President's proposal differ on the fundamental issue relating to emissions during automobile refueling. While S. 1630 would require Stage II vapor recovery "at the gas pump" and "onboard" refueling controls (beginning in 1993) to reduce organic emissions during vehicle refueling, the President proposed that stage II controls be targeted only to areas where such controls will be the most effective. The Administration believes that "onboard" requirements are inappropriate because of the unresolved associated safety issues.

TITLE III - TOXIC AIR POLLUTION: Both S. 1630 and the President's proposal employ a technology-based approach to reduce toxic air pollution; an advantageous approach primarily because it emphasizes control technology, rather than uncertain and debatable health risk estimates. Nevertheless, there are four important distinctions between the two proposals.

A key distinction is the number of regulations, or regulatory

agenda, that each proposal would establish. Here, S. 1630 would require all source categories to be regulated within 10 years, while the President's proposal would require all regulations to be in place within 10 years, and allow EPA discretion in developing regulations for the lower 50% of the source categories. The Administration believes this discretion is essential to avoid costly efforts to develop regulations for source that are determined not to warrant control, particularly in view of the fact that controlling 50% of the source categories will address 80% of the associated public health risk.

Perhaps the most significant distinction lies in the approach taken by each proposal toward evaluating the residual public health risk remaining after the technology-based standards are applied. While S. 1630 would require that all sources meet the goal of 1 in 1 million risk of cancer for the most exposed individual, the President's proposal acknowledges the uncertainty associated with estimating risk by allowing the Administrator to determine on a case by case basis, whether the residual risks are "unreasonable" considering certain key factors, including cost. In view of the uncertainty surrounding this matter, EPA must have this discretion in order to avoid promulgating rules that would likely close large segments of industry without significant health risk improvements.

A final difference focuses on the accidental releases provisions in the two bills. Both proposals address this serious potential problem, however S. 1630 provides EPA no discretion in establishing regulations that may require sources to prepare risk management plans. As with other places where S. 1630 and the President's proposal disagree on discretion, the Administration believes that discretion is essential for determining what the best solutions are for a particular problem.

TITLE V - ACID RAIN: S. 1630 and the President's proposal are very similar on the major issues of size of emissions reductions, timing, market-based approach, emissions offsets for new sources, and no explicit cost sharing. In addition, S. 1630 corrects two problems acknowledged by the Administration to exist in its acid rain provisions. First, by providing allowances for all clean sources (less than 1.2 lb SO2/mmBtu), S. 1630 acknowledges the special needs of clean sources to have room to grow. It also assures that upon retirement of these sources, allowances will become available for new sources, thus ensuring that a nationwide electric utility SO2 emission cap of 10 million tons per year is maintained. Second, S. 1630 also responds to concerns of growth states and independent power producers that allowances will be hoarded by allowing EPA to withhold 2% of the allowances and sell them if new sources cannot find them through the market.

There are also three acid rain provisions contained in S. 1630 that the administration does not support. First, regarding clean

coal technology incentives, S. 1630 failed to include several of these incentives that the Administration believes are critical for encouraging such emerging technologies and realizing their associated energy, environmental and economic benefits. Second, S. 1630 includes a clean state provision that exempts the dirtiest units in so-called clean states from the acid rain provisions, resulting in significantly higher emissions increases in the west than are allowed by the President's proposal. Finally, S. 1630 changes the NOx program contained in the President's program from a technology standard for existing boilers to an allowance system with tighter controls. This change significantly increases the overall costs of the acid rain program, for relatively few more emission reductions.

TITLES IV AND VI - IMPLEMENTATION AND ENFORCEMENT TOOLS: Both S. 1630 and the President's Proposal contain provisions that establish the necessary tools for enforcing and implementing the Clean Air Act Amendments. The permit program, in both proposals, requires that major air pollution sources and certain other sources obtain operating permits. In addition both bills contain similar enforcement provisions, including, among others, criminal prosecution, citizen suits and administrative enforcement proceedings,. The Administration supports both the permitting and enforcement provisions in S. 1630.

CFCs AND GLOBAL WARMING: S. 1630 adds provisions that are not in the President's proposal and which are aimed at addressing stratospheric ozone and global warming concerns. The Administration does not support these provisions because any unilateral action, such as these provisions, aimed at addressing a global problem is inappropriate in this bill. Such actions have not been fully analyzed and are thus inappropriate to include at this time in clean air legislation,

ALTERNATIVE FUELS: S. 1630 contains no clean alternative fuels program. This important omission is strongly opposed by the Administration. As the President has said before, it is much more cost effective and technically feasible to implement a modest clean fuels program than to continue establishing more stringent car tailpipe standards. For decades, we have reduced auto emissions by changing vehicle technology,; it now time to view the fuel as an equal partner in gaining potential emission reductions. The Administration strongly urges the Senate to include clean fuels program such as that contained in the President's proposal.

MUNICIPAL WASTE COMBUSTORS: The municipal waste combustor provisions in S. 1630 are extraneous, since EPA has recently proposed standards to address air emissions from both new and

existing incinerators. In fact, the Administration believes that the provisions the Senate Committee included may be less environmentally protective than the EPA proposed program, while also being more expensive.

II. CRITIQUE OF S. 1630

A. Urban Air Quality

1. Background

The central focus of the original Clean Air Act is to protect public health and welfare by attaining and maintaining the National Ambient Air Quality Standards (NAAQS). Under the Act's framework, EPA sets air quality standards and provides state with guidance on how to achieve the standards, while the states are primarily responsible for managing air quality through the development and execution of State Implementation Plans (SIPs). EPA has established NAAQS for six pollutants, and the state/federal air quality management system has successfully reduced urban SO2 and lead concentrations and made substantial progress reducing emissions related to all six NAAQS pollutants. Nevertheless, for a variety of reasons, progress in recent years has been limited, and nonattainment problems persist for ozone, carbon monoxide, and particulate matter (PM-10).

Today, there is general consensus that the attainment deadlines (which have been passed for O3 and CO), Federal requirements, and planning mechanisms contained in the 1977 statute need revising to improve and nurture programs if the ultimate goal of healthy air quality is going to be achieved. In view of this stark conclusion, the Administration has developed a coherent, balanced strategy for addressing urban air quality. This approach is founded on the following principles:

(1) Striking an appropriate balance between State and Federal roles: The Federal government, with guidelines and regulations, can provide state and local governments substantial support for developing strategies to control industrial and other stationary air pollution sources. The Federal government is also well positioned to develop national standards for automobiles and the alternative fuel programs contained in mobile source provisions. States on the other hand, need the flexibility to select appropriate measures adapted to various unique air pollution situations.

(2) Promoting cost/effective controls: Measures for controlling air pollution can vary substantially in cost. The Administration program offers pollution reductions that are very similar to the Senate bill for substantially less cost.

(3) Tailoring sources, deadlines, planning and progress requirements to the problem: The ozone, carbon monoxide and PM-10 provisions call for appropriate development of

inventories and air quality needed for pollution control strategies. As with S. 1630, the President's proposal provides longer deadlines and additional requirements for areas with more serious problems. However embedded in the President's proposal is more flexibility for carrying out the goals of the legislation so that solutions can be better adapted to unique local situations.

While S.1630 adopts an overall structure that appears similar to the Administration proposal, it differs in a number of ways that depart from the fundamental principles noted above, as discussed in detail below. For example, S. 1630 would achieve somewhat similar reductions in VOC precursors but would do so in a substantially costlier manner. Moreover, S. 1630 often eliminates the flexibility for state and federal agencies to tailor plans, programs, and sanctions to particular air pollution problems.

2. Key Differences

The nonattainment provisions in the President's Bill and in S. 1630 contain differences in eight key areas. These areas are:

- o attainment status designations
- o air quality classifications and attainment deadlines
- o specific control program characteristics
- o sanctions
- o federal implementation plans
- o interstate ozone transport
- o mandatory federal measures
- o PM-10 control

a. Attainment Status Designations - Traditionally, States have reviewed air quality data and notified EPA which areas should be designated as not attaining air quality standards. This approach makes sense because it recognizes that the states are best suited to identify, characterize and report their air pollution problems to the overseeing federal agency (EPA). S. 1630 seriously departs from this approach by giving the Administrator unilateral authority to make such designations. Under S. 1630, areas violating the ozone, CO, and PM-10 standards would be designated nonattainment as a matter of law. The President's proposal, on the other hand, allows States to maintain their pre-eminent role in identifying, characterizing, and reporting air pollution problems while still giving the Administrator the final authority to approve or modify the submissions from the State. This preferable approach has worked well historically, while recognizing the state's expertise with its own air pollution problems.

S. 1630 also requires that ozone nonattainment areas be automatically expanded to encompass multi-county metropolitan statistical areas (MSAs or CMSAs) geographic boundaries. The

President's proposal, echoing the underlying principles it is founded upon, allows each State to determine what the boundaries of the nonattainment area should be, while retaining for the Administrator the final authority to approve or modify the submission from the State. This approach recognizes the importance of each state's understanding of its own air pollution problems, allowing the states to retain their pre-eminent role in identifying and characterizing the best approaches to cleaning the air. The Administration believes this philosophy is essential for effective air pollution control.

b. Air Quality Classifications and Attainment Deadlines - S. 1630 establishes four ozone nonattainment classifications and two CO classifications. Although the President's proposal contains the same number of classifications, they are based on different air quality "thresholds". For ozone, S. 1630 thresholds generally create a "worst" class for Los Angeles, a "severe" class for 8 areas with high levels, a serious class with about 3 areas, and one large class (over 60 areas) with the lowest ozone levels. The broad ranges used in making the classifications for areas with lower concentrations result in areas with significantly different pollution levels being grouped together and may result in over-control. The President's proposal more evenly groups areas by establishing narrower design value ranges. The "worst" (severe) group in the Administration position contains four urban areas, (Los Angeles, New York, Houston, and Chicago), while the other three groups contain about 30 areas each.
For CO areas, the bills similarly classify area quality areas. Here, the most important concern about S. 1630 is the potential for imposing excessive pollution control costs in areas with only "marginal" pollution problems.

c. Specific Control Program Characteristics - FEES: Besides establishing attainment deadlines, the classification schemes specify the control measures and other planning requirements that various nonattainment areas must implement. Under S. 1630, all nonattainment areas would be required to implement programs to assess permit fees and annual "emission fees" for stationary sources and annual registration fees for automobiles. Such fees are unnecessary to promote control and are redundant with the operating permit fees, included in the permit program.

OFFSETS AND NETTING: Both proposals require new major VOC sources to obtain sufficient emission reductions from other sources to more than offset their increase in emissions. But, S. 1630 restricts the ability of a potential new air pollution source to "net out" of new source review permit requirements by reducing permitted emissions from an existing operating pollution source. For almost all areas, the S. 1630 specifies that the offsets must occur at a ratio of 1.5 to 1 (compared to the emission increase).

In the "top" 9 cities, the ratio is 2 to 1. This does not provide enough flexibility to account for local conditions, under which such requirements would be unreasonable.

PROGRESS REQUIREMENTS: The President's proposal recognizes that about a third of the nonattainment areas are likely to attain without any additional control measures (i.e., through reductions from existing measures and the current Federal Motor Vehicle Control Program). This proposal, therefore, minimizes the possibility of costly "over control" by requiring such areas to correct existing measures (when necessary) and develop sound emission inventories to serve as the basis to evaluate and monitor future growth.

Under the President's proposal, another third of the ozone areas must implement Stage II vapor controls and achieve a 15% reduction in VOC emission reductions by 1995, (averaging 3% per year). S. 1630 requires reductions of about 4 percent per year and the worst areas must also achieve similar NOx reductions. Beyond the year 2000, some of the more serious nonattaining areas may have extreme difficulty achieving an annual 4 percent reduction as compared to the 3% per year in the Administration. Yet, unlike the President's proposal, S. 1630 does not provide a structure or procedure for modifying the percent reduction requirement in those cases where such a requirement would cause severe economic or social disruption.

ATTAINMENT DEMONSTRATIONS: S. 1630 requires about 10 more areas to prepare and submit full demonstrations of attainment based on photochemical dispersion modeling. The President's proposal requires fewer areas to perform these tasks since attainment is expected in the near term (5 years) through implementation of the required measures and achievement of the annual emission reduction requirements.

CONTROLS ON MAJOR STATIONARY CONTROLS: S. 1630 and the President's proposal both require States to implement reasonably available control technology (RACT). S. 1630 also requires states with higher ozone levels to apply this control technology to smaller VOC sources and to NOx sources. Defining "major" VOC sources at smaller sites adds greatly to the number of sources that are directly affected by permits, fees, and controls, without proportional increase in total emission decreases. Additional NOx controls in some areas could be expensive and counter-productive, yet S. 1630 would not permit the flexibility to consider such cases.

TRANSPORTATION CONTROLS: In areas with severe problems, S. 1630 would require all businesses with over 100 employees to develop and implement programs to reduce travel to their facilities. If such programs fail, the Senate bill requires employers to pay a $50/month fee for subsidized parking spaces.

d. Sanctions - While both bills provide for sanctions to be used when necessary to encourage appropriate State efforts to develop and implement pollution control strategies, S. 1630 allows essentially no discretion in applying such sanctions. Instead, all sanctions must be imposed when the State fails to satisfy a requirement, regardless of whether reasonable efforts are being made by the state to address a nonattainment problem. The Administration strongly believes EPA should be able to consider whether a state is making a reasonable effort to correct its failure when deciding whether and which sanctions should be imposed.

e. Federal Implementation Plans (FIPs) - FIPs are air pollution control plans, similar to those that states must develop and submit to EPA, that contain a complete demonstration of attainment and all the control measures needed to attain the applicable air quality standard. S. 1630 requires EPA to develop and implement a FIP in lieu of a state prepared and managed SIP if sanctions have not caused the state to submit an approvable plan. While the President's proposal recognizes that a FIP (or partial FIP) may eventually be needed, it also provides the Administrator needed authority and flexibility to determine when the FIP would best satisfy the goals of the Act, after considering the nature of the State failure, the feasibility of Federal measures, and the magnitude of the nonattainment problem.

f. Ozone transport - Both proposals contain provisions that recognize the importance of interstate ozone transport, and thus the need for Regional Transport Commissions to assess the problems and develop strategies. However, despite recent scientific findings that region-wide control of VOC emissions in attainment areas may be of limited value, S. 1630 presumes the need for certain measures (I/M and RACT) throughout the region before further evaluation of the problem and other strategies. The Administration believes the regional commissions will be best suited to make recommendations on additional controls needed throughout those areas. The S. 1630 provision is likely to lead to costly over-control in some areas with no environmental benefit.

g. Federal measures - Both bills require EPA to provide to Congress a report on the emissions and control of consumer and commercial products, but only the S. 1630 mandates that regulations be subsequently developed. The President's proposal allows EPA to regulate these emissions to support efforts to attain air quality standards only after studying the feasibility of such a strategy. The Administration believes it is not good public policy to assume that certain reductions can be achieved from a previously

uncontrolled source, like consumer and commercial products, without first studying the control methods and reduction efficiencies.

h. Particulates Matter (PM-10) - Both the President's proposal and S. 1630 allow deadline extensions for PM-10 areas that cannot meet the standards in the next several years. In this event, such areas would be required to adopt reasonably available control measures (RACM) for urban fugitive dust, woodsmoke and prescribed fires. Both bills also give extensions to areas with PM-10 problems dominated by natural fugitive dust emissions. However, there are several requirements in S. 1630 applicable to PM-10 nonattainment areas that are not found in the President's proposal, which are not supported by the Administration

In addition S. 1630 requires SIP to include a program for collecting emission fees from major sources of PM-10 "precursor" pollutants, as well as direct PM-10 emissions. "Precursors" are gases such as SO2, NOx, ammonia and VOC that can be transformed into particles in the atmosphere. The relative contribution of such pollutants to air quality problems varies substantially by area. The S. 1630 provisions could result in a large number of sources with little or no contribution to PM-10 problems paying such fees.

B. Motor Vehicles

1. Background

While motor vehicles being built today emit much less air pollution (60% to 80% less, depending on the pollutant) than those built in the 1960s that had no emission controls, cars and trucks still account for almost half of the emissions of the ozone precursors VOCs and NOx, and up to 90% of the CO emissions in urban areas. The principle reason for this problem, one which the authors of the current clean air act did not anticipate, is that there has been rapid growth in the number of vehicles on the roadways and the total miles they travel. This growth has offset a large portion of the emission reductions gained from vehicle and fuel controls. In addition to contributing to the problem of ozone and CO nonattainment, motor vehicles account for about 56% of the emissions of toxic air pollutants, such as benzene, gasoline vapors and diesel exhaust. By comparison, large stationary sources contribute only about 20% of the air toxics.

In view of the unforeseen growth in automobile emissions in urban areas combined with the serious nonattainment problems in many urban areas, the Administration decided that its clean air proposal must contain not only stricter traditional controls on mobile air pollution sources, but an innovative and far reaching program, the clean, alternative fuels program; one designed to

provide a long-term reconciliation of the environment and automobile so that Americans can continue to enjoy the freedom of their own cars and clean air.

With some notable exceptions: particularly the lack of an alternative fuels program and significantly higher overall compliance costs, the motor vehicle provisions contained in S. 1630 are similar in concept to those in the Administration's proposal. As becomes evident from the discussion below, the key reason for the higher costs associated with S. 1630 is that the Senate has made some of the provisions in its bill more stringent than those contained in the Administrations proposal. These variations from the Administration's proposal are insupportable because they generally are not the most cost-effective to achieving the goal of cleaning the air.

The conceptual similarities between the two proposals are worth noting prior to discussing key differences. First, by requiring further reductions in the volatility (rate of evaporation) of gasoline nationwide, implementing wintertime programs to use lower CO emitting fuels, and calling for a reduction in the amount of sulfur in Diesel fuel, S. 1630 reflects agreement with the Administration that cleaner gasoline will greatly reduce emissions from the existing fleet.

Second, both bills require additional controls on the vehicle itself. These include more stringent tailpipe standards to control exhaust pollutants, improvements in the controls of evaporative emissions from vehicles, a new standard to control CO emissions at cold temperatures and the installation of self-diagnostic equipment on vehicles to monitor the functions of critical emission control equipment and alert the driver of the need for repairs when a problem occurs.

Finally, both bills recognize the benefits that can be achieved by requiring periodic emissions inspections of on-road vehicles so both require certain states to enhance Inspection/Maintenance (I/M) programs. Although their approaches are different, both proposals require the control of gasoline vapors that escape during vehicle refueling. Also, both bills give EPA new authority to regulate emissions from non-road engines and fuels. The similarities reflect the consensus opinion that total vehicle miles travelled in the U. S. will continue to grow at a fairly constant rate and, therefore, further improvements must be obtained from the "traditional" motor vehicle control programs. The similarities also confirm that the control programs put in place at the federal, state and local levels over the past 20 years have been very successful.

2. Key Differences

The most significant and objectionable difference between S. 1630 and the Administration proposal is that S. 1630 does not include a clean, alternative fuels program. A detailed discussion of this serious omission is contained later in the report. The other key differences between the mobile source provisions of the proposals, ones which alter the level of stringency thus raising the costs of S. 1630 and which the Administration objects to, are as follows.

a. Tailpipe Standards

An important difference between the Senate and Administration proposals is their approach to long-term vehicle control measures, i.e., those which would take effect in the year 2000 and beyond. There are three basic options available to policy makers to achieve the vehicle-related VOC emissions reductions necessary to bring the nation's our major urban areas into attainment with the health-based ozone standard.

The first option is to restrict automobile use in certain areas. Such restrictions, however, are generally considered inappropriate, as they are construed to infringe on the "right" of the public to be mobile. In certain severely polluted areas, such "draconian" measures may be more palatable, however they are best devised and administered by state and local officials. Neither the Senate Bill nor the Administration proposal contain this option.

The second option is to set very stringent auto tailpipe standards. This is the approach taken by S. 1630 in that it establishes tailpipe standards for exhaust emissions of hydrocarbon (VOCs), CO and NOx that are 50% more stringent than the so-called "Tier I" standards that both proposals would impose on new cars in the mid-1990s. These Senate "Tier II" standards would be effective with the 2003 models. In the Administration's view, this is not an appropriate choice for three reasons: (1) it offers very little environmental benefit; (2) it may not be technically feasible to control gasoline-powered cars to such low levels; if such low levels are achievable, EPA estimates the costs will be about $500 per car; and, (3) the emission benefits will not be nearly high as those associated with the alternative fuels program.

The third option, embodied in the Administration's approach, would reconcile the car and the environment by introducing cars which can operate on fuels which are inherently cleaner-burning than gasoline. Clean fuel cars operating at the turn of the century can achieve almost 70% less emissions of ozone precursors as compared to a car built to meet the Senate's Tier II tailpipe standards. They can also achieve very significant reductions in total vehicle emissions of toxic air pollutants. (Additional discussion on the Clean Fuels Program is found later in this

report.)

b. CO2 Standards

While the Administration proposal maintains the scope of the current Clean Air Act and does not introduce a CO2 automotive tailpipe standard, S. 1630, responding to global warming concerns includes such a standard. Specifically S. 1630 would establish for the first time a standard limiting the amount of CO2 emissions from auto exhaust. Although CO2 is not harmful to health, it is a potent greenhouse gas which can cause global warming. The Senate sets a two-step standard: beginning in 1996 new cars must on average meet a CO2 standard which corresponds to 33 miles per gallon (mpg) fuel efficiency, and beginning in 2000 the standard corresponds to 40 mpg.

The Administration opposes the inclusion of CO2 standards in the Clean Air Act amendments for three reasons. First, it is premature to mandate specific controls to address global warming. International negotiations are underway and should be completed prior to unilateral U. S. action. Second, fuel economy requirements raise important non-environmental questions that need to be carefully considered, such as feasibility, cost and the competitiveness of the U. S. auto industry with foreign manufacturers. Finally, the entire set of proposed Clean Air Act Amendments covers many complex and controversial issues. To now include an auto control program aimed at reducing emissions of greenhouse gases brings a host of new, equally complicated issues into the debate. The CO2 provision presents a real risk of overloading the proposals and preventing any legislative action on clean air.

c. Enhanced I/M

There is a serious difference between the stringency of the enhanced I/M programs embodied in the two proposals. While the Administration proposal contains a statutory requirement that Serious and Severe nonattainment areas enhance their existing I/M programs to make them more effective, S. 1630 would force at least 15 and as many as 34 areas to start entirely new I/M programs. In addition, under S. 1630, 32 northeast cities that presently are attaining the ozone standard would be required to start new I/M as part of the Northeast Ozone Transport Region requirements. Obviously, the cost differential associated with these varying approaches would be significant, with the Senate's approach costing significantly more than the Administration's approach. Aside from the cost factor, the Administration believes that, except for areas with serious air quality problems, decisions on whether or not to implement I/M programs are best left to state and local officials who better understand the causes of their particular air pollution

problems.

d. Refueling Emissions

The Administration proposal and S. 1630 differ on the fundamental issue relating to refueling. While S. 1630 requires Stage II "at the pump" controls in all serious, severe and extreme ozone nonattainment areas, it also mandates that beginning with the 1993 models "onboard" refueling controls must be installed on all cars. In addition, S. 1630 requires that Stage II be implemented statewide in the entire Northeast Transport Region.

The Administration believes it is inappropriate to include an onboard mandate because of the unresolved safety issues of those systems and the advantages of Stage II (these advantages include that stage II can be implemented more quickly). In view of this understanding, the Administration has chosen Stage II as the most cost-effective means to control refueling emissions.

C. Toxic Air Pollution

1. Background

Toxic air pollution can be defined as the air pollution which is hazardous to human health but is not covered under another the ambient air quality programs in the Clean Air Act. These pollutants include carcinogens, mutagens, and reproductive toxins. The current Clean Air Act has seriously failed to reduce emissions of these very threatening substances, facilitating the regulation of only eight pollutants out of many toxic pollutants being emitted.

This problem is widespread. Reporting by industry under the Superfund "Right to Know" rule (SARA Section 313) indicated that more than 2.7 billion pounds of toxic air pollutants are emitted annually. EPA studies indicate that exposure to air toxics may result in as many as 1000 to 3000 cancer deaths each year.

Why has the current program failed? The failure of the current air toxics program is fundamentally due to the health and risk-based approach of the existing Section 112. Risk estimates are expressed as the likelihood of an individual getting cancer or the number cancers in the exposed population. Risk assessment is a highly inexact science which is fraught with uncertainties. Standards promulgated by EPA for air toxics have been repeatedly challenged in court resulting in a paralysis of the regulatory program. For example, recent standards for benzene and radionuclides (both carcinogens) have taken over ten years to promulgate.

How are these problems addressed by the new legislation? Both S. 1630 and the Administration proposal employ a technology-based approach to reduce toxic air pollution. This means that the sources of toxic air pollution would be identified and automatically required to apply the Maximum Achievable Control Technology (MACT). The level of control required would be based on the best control efficiency achieved by similar sources rather than the potential risk to public health. This approach has several key advantages. First, the emphasis is on control technology, not on uncertain and debatable risk estimates. Second, these regulations apply to entire categories of polluters (i.e., source categories) and thus would control all of the toxic pollution from these sources rather than only one pollutant. Third, risk would be evaluated in the second step of new approach. Although, a different strategy is used, both the Senate and Administration proposals would require a risk evaluation and perhaps further regulation subsequent to applying the technology-based controls.

2. Key Differences

The following paragraphs provide some brief details on the specific provisions and implications of the Senate and Administration air toxics proposals. While these proposals are generally similar, there are a few important differences which are highlighted below.

a. Residual Risk - The evaluation of the public health risk remaining after the application of technology based standards is the very different under the Senate and the Administration proposals. The Senate proposal would require that all sources meet a 1 in 1 million risk of cancer for the most exposed individual. Any source above this level could receive extensions of compliance date based on the magnitude of the risk estimate. For example, sources with risks above 1 in 10,000 after the application of technology based standards could receive a five year extension based on economic hardship. If the sources could not reduce the risk from its emissions to less than 1 in 10,000 after this extension period it would be forced to close. A sources with risks greater than 1 in 1 million but less than 1 in 10,000 after application of technology based standards would have to qualify for an extension every five years by demonstrating that it had applied all feasible control measures to try to achieve a 1 in 1 million risk level.

The Administration proposal also deals with the risk that would remain after the application of technology based controls. Instead of forcing compliance to some pre-determined "bright-line" risk number, the Administration proposal would determine whether the residual risks are "unreasonable" considering the magnitude of

the health risks, costs and feasibility, and other relevant factors. Given the degree of uncertainty in risk estimates and the unique nature of each regulated industry, the discretion allowed in the Administration proposal is a necessity for the reasonable implementation of this legislation. Without this discretion the EPA would be forced to promulgate rules that would likely result in closure of large segments of industry without commensurate health benefits.

b. Regulatory Agenda - Both the Senate and the Administration proposal have adopted the same list of hazardous air pollutants. Both proposals would require EPA to develop a list of source categories (industries) which emit one or more of the listed pollutants. This list of source categories would serve as the basis for the regulatory agenda. Source categories would be regulated in a priority based on their potential risk to public health.

The key difference between the two proposals is the number of the required regulations. The Senate proposal would require the regulation of 100% of the listed source categories within 10 years. The Administration proposal would also require all of the regulations to be in place within 10 years but allows discretion for the development of regulations for the lower 50% of the source categories. This discretion is essential for a reasonable implementation of this legislation. Without regulatory discretion the EPA would likely spend considerable resources in developing regulations for source categories which may have found their way on to the list but do not warrant controls. And use of the resources to develop standards for undeserving categories would reduce the resources available for the residual risk evaluation, and application of tighter controls on risky categories--those that pose a real health risk.

c. Accidental Releases - Both the Senate and Administration proposals address the serious problem of accidental releases of toxic air pollutants. As with other key provisions, the major difference between the proposals is the degree of discretion allowed EPA in implementing the legislation. The Senate proposal requires regulations which may require that sources prepare risk management plans and submit them to the government; a requirement that may impose unnecessary costs on sources. Both proposals also include the establishment of an accidental release investigation board. Although in practice these bodies would likely function in much the same way, the Senate proposal would require that the Board be an independent organization. Creating an independent board adds another organization to an area already crowded with overlapping regulatory responsibilities and would likely be very costly.

D. Acid Rain

1. Background

Acid rain occurs when sulfur dioxide and nitrogen oxide emissions are transformed in the atmosphere and return to the earth in rain, fog or snow. Approximately 20 million tons of SO2 are emitted annually in the U. S., mostly from the burning of fossil fuels by electric utilities. Acid rain damages lakes, forests and buildings, contributes to reduced visibility, and is suspected of damaging human health.

S. 1630 is very similar to the Administration proposal on the major issues of size of emissions reductions, timing, market-based approach, emissions offsets for new sources, and no explicit cost-sharing. In several areas the Committee strengthened the bill, however, in other cases the Administration does not support the Committee's modifications. The similarities include:

a. Size of SO2 emissions reduction - both proposals call for a 10 million ton reduction below 1980 levels; both accept a 1.5 million ton reduction from industrial sources and the diesel desulfurization rule, and both require an 8.5 million ton reduction from utility sources (3.5 million in Phase 1 plus 5.0 million in Phase 2).

b. Timing - Administration proposal calls for a Phase 1 reduction by December 31, 1995, a Phase 2 reduction by December 31, 2000, with a 3 year extension for use of "repowering" technologies until December 31, 2003. The Senate bill has a Phase 1 date of January 1, 1995, and a Phase 2 date of January 1, 2000--both a year earlier, but a 4 year extension for "repowering" to December 31, 2003 -- the same final compliance date.

c. Market-based approach - both proposals rely on the issuance of emission allowances for utility sources which can be bought and sold to allow companies to meet their emission limitations at the lowest possible cost. Such transfer would not require case-by-case approval by EPA, thus greatly facilitating emissions trading.

d. Sources affected in Phase 1 - both proposals list and require 107 utility plants whose boilers are larger than 100 MW in size with 1985 emission rates greater than 2.5 lbs/mmBtu to receive allowances equal to 2.5 lbs/mmBtu times their average 1985-1987 fuel use.

e. Offsets for new plants - both proposals would require new utility units to obtain allowances from existing or retired units in order to operate, thus retaining the 10 million ton emission reduction.

f. Cost sharing - neither proposal contains taxes, emissions fees, or direct subsidies for pollution control.

g. No mandated controls - neither proposal requires that specific controls be used, leaving to companies the choice of fuel switching, control technology, conservation, etc.

2. Improvements

The Senate proposal corrects three problems acknowledged to exist in the Administration proposal. They are:

a. Senate proposal provides allowances for all clean (less than 1.2 lb/mmBtu) sources. The clean sources are given allowances based on a 20 percent increase in fuel utilization over the 1985 levels thereby allowing growth in emissions at the cleanest units. Some very clean dual fired oil and gas units (less than 0.4 lbs/mmBtu) are given allowances up to the lesser of their permit levels or 0.4 lbs/mmBtu instead of tying them to actual 1985 levels which in some cases were as low as 0.01 lbs/mmBtu.

b. This modification solves two problems: first it acknowledges the special needs of clean sources to have room to grow; second, upon retirement of these sources allowances become available for new sources, ensuring that a utility SO2 emission cap closer to the Administration goal of 8.9 million tons is maintained. (The Administration proposal inadvertently reduced the cap to 5.1 million tons)

c. The Senate proposal also responds to the concern of growth states and independent power producers that allowances will be "hoarded." Although we believe that the market is "thick", i.e. structurally and behaviorally competitive, we accept the desirability of this fix. The hoarding fix allows EPA to withhold 2% of the allowances and sell them for $1500 apiece if new sources cannot find them through the market. If no one comes to EPA to buy the allowances, they will be distributed to all companies they were withheld from.

3. Key Disagreements

The Senate made a few additions and deletions relative to the Administration proposal that are not supported by the Administration.

a. Omission of most Clean Coal Technology (CCT) incentives - Although the Senate bill contains the time extension for repowering, it does not include several other CCT demonstration incentives that we believe are critical for encouraging these emerging technologies and realizing their energy, environmental,

and economic benefits.

b. Clean States Provision - The Senate Committee bill has a "clean states" provision which exempts certain states from most of the provisions of the bill. The basis for the exemption is the amount of existing capacity that is scrubbed in states with total SO2 emissions below 150,000 tons per year. The exemption applies to the highest emitting sources in the state, as well as to the scrubbed units. Thus, it exempts the dirtiest units in the so-called clean states and results in significant emissions increases in the West relative to the Administration bill.

c. Increase in NOx reductions - The Senate proposal changes the NOx program from a technology standard for existing boilers which achieves a 2 million ton emission reduction from projected utility emission levels (Administration proposal) to an allowance system with tighter controls that would achieve about a 2.3 million ton reduction from projected utility emission levels. The Senate's change significantly increases the overall costs of the acid rain provisions by $400 million annually by 2005, and is therefore insupportable.

E. Implementation and Enforcement Tools

1. Background

Both the Senate Bill and the Administration proposal contain provisions that establish the necessary tools for enforcing and implementing the Clean Air Act. Title V of the Senate bill requires that major sources of air pollution, and certain other sources of air pollution, obtain operating permits. These provisions are generally consistent with the Administration's proposed operating permit program.

Title VI of the Senate Bill, containing enforcement provisions, is also generally consistent with the Administration's proposal. In conjunction with the enforcement advantages of the permit title, Title VI will improve significantly many different aspects of air enforcement. Notable among these are criminal persecution, citizen suits and administrative enforcement proceedings.

2. Permits

a. The Permit Program - The Administration supports the Senate bill's permit provisions, which are essentially the same as those contained in the Administration's proposal.

The essence of the permit program contained in both proposals is to require certain sources of pollution to operate under a

permit that clearly sets out all of the source's pollution control obligations under the State implementation plan or other Clean Air Act requirements. This program--in many ways, the most important procedural reform contained in the Senate bill--will greatly strengthen enforcement of the Clean Air Act, as well as ease the administrative burdens that accompany efforts to change a source's pollution control requirements.

Under the Senate bill, States must submit operating permit programs, in accordance with EPA regulations, within three years of enactment. EPA may approve or disapprove the State program in whole or in part. Six months after EPA approves the State program, major sources must submit permit applications to the State. After providing notice to EPA and contiguous States, and allowing public comment, the State is to submit a proposed permit to EPA. EPA has 90 days to review the permit. If EPA takes no action, the permit will be issued to the source. If EPA objects, the State must revise the proposed permit, and if the State fails to do so, EPA must issue (or deny) the permit.

Once it is issued, the permit will be publicly available, and sources will be required to submit to the permitting authority reports concerning the extent of their compliance with their permit obligations. The permit may have a life of no longer than five years, after which it must be renewed.

Title V includes special provisions and grants EPA regulatory discretion in certain areas in order to ease administration of the permit system and provide protection against penalties for sources that properly submit permit applications and obtain permits.

b. Why the Permit Program Enhances Air Quality Control - Adding an operating permit program to the Clean Air Act makes the Act more consistent with other environmental statutes. The Clean Water Act, the Resource Conservation and Recovery Act, and the Federal Insecticide, Fungicide, and Rodenticide Act (as well as, to a more limited extent, the Toxic Substances Control Act) require permits. The Clean Air Act already requires a construction permit for certain sources of pollution, and about 35 States have their own laws that require operating permits for most sources as well.

The key improvements offered by the permit program are:

o The permit program will clarify and make more enforceable a source's pollution control requirements. Currently, a source's pollution control obligations may be scattered throughout numerous hard-to-find provisions of State and federal regulations, and in many cases, these provisions are ambiguous. In addition, in many cases, the source is not required under the SIP or other Clean Air Act provisions to submit periodic compliance reports to EPA or the States. The

permit program will ensure that all of a source's obligations with respect to its pollutants will be contained in one permit document, and that the source will file periodic reports identifying the extent to which it has complied with those obligations. Both the permit and the reports must be made publicly available.

o The permit program will simplify and shorten the procedures for changing the source's pollution control obligations. Currently, for sources subject to a State implementation plan ("SIP"), any change in the source's pollution control obligations, no matter how minor, must be approved or disapproved by EPA through notice-and-comment rulemaking, a laborious and resource-intensive process that has led to unacceptably long delays in EPA action on SIP revisions. The permit program will end this problem for source-specific SIP revisions by placing a strict time limit--ninety days--on EPA's review. If, after this time, EPA takes no action, the revised permit will automatically be issued.

o The permit program will provide a ready vehicle for the States to take over administration, subject to Federal oversight, of significant parts of the air toxics program and the acid deposition program.

o The permit program--through the permit fee provisions--will greatly augment the State's resources to administer pollution control programs by requiring sources of pollution to pay their fair share of the costs of the State's air pollution program.

The permit program will impose additional administrative requirements on the sources, States, and EPA. However, the bill provides EPA with flexibility to significantly reduce these burdens. Most importantly, EPA may develop streamlined procedures--which would eliminate most administrative concerns--for permitting sources when the permit simply reiterates existing SIP or other Clean Air Act requirements, or where the permit conforms to sample permits developed by EPA.

3. Enforcement

a. <u>The Enforcement Program</u> - The Administration is designed to update the Clean Air Act to include flexible enforcement authorities contained in other, more recently amended, environmental statutes. The proposals were developed over a period of several years based on ongoing enforcement experience with the Act and other environmental statutes.

The President's proposed amendments stem from four overriding

policy concerns: a) interest in conforming clean air enforcement authorities to other environmental statutes; b) amendments to address court decisions and legal issues which limit enforcement of the Clean Air Act; c) amendments to improve administrative enforcement authorities; and, d) amendments to clarify and confirm existing enforcement, and to correct technical problems with the Act. As a whole, the President's proposed amendments should ensure a substantially increased deterrent effect and consistency in implementation.

The amendments strengthen and clarify the Act's enforcement authorities in the following areas:

- o Enhanced Criminal Enforcement
- o Enhanced citizen suit enforcement
- o Enhanced administrative enforcement
- o amendments to address technical problems and court decisions

The S. 1630 enforcement provisions are generally consistent with the President's proposed provisions, and are therefore supported by the Administration.

F. Major S. 1630 Additions

There are several provisions in S. 1630 that introduce entirely new air pollution control programs into the Clean Air Act amendments proposed by the President. These additional provisions are not supported by the Administration for reasons discussed below.

1. Proposed Provisions on CFCs and Global Warming

a. Stratospheric Ozone and Global Climate - S. 1630 contains provisions related to stratospheric ozone and global climate protection. While these sections have sought to build on the structure and requirements currently contained in the Montreal Protocol, EPA believes that unilateral action would be inappropriate given the global nature of this problem. The Administration believes that stratospheric ozone and climate protection can best be addressed in the context of ongoing international negotiations. Unilateral actions, such as including requirements in the U. S. Clean Air Act Amendments, are not effective safeguards of the global environment and would unnecessarily punish national interests.

The process of strengthening the Montreal Protocol is well underway and should be allowed to run its course. Changes to the protocol are scheduled to be decided at the second meeting of the

Parties which is scheduled for June 1990. Action prior to thiS, in the context of Clean Air Act amendments, would have almost no environmental benefit.

The Agency already has broad regulatory authority under Section 157(b) of the Clean Air ACt to undertake many of the specific requirements (e.g. , recycling, product bans, labelling) contained in the bill. Several of these actions are currently under consideration by the Agency as discussed in an advance notice of proposed rulemaking (53 Federal Register 30604; August 12, 1988) as supplements to its current production-based regulatory system. Specific Congressional action is therefore unnecessary.

Part B of Title VII requires information collection and reports to Congress concerning methane role as a greenhouse gas. Since analysis of methane emissions and controls are being conducted as part of the Intergovernmental Panel on Climate Change, this section of the bill is not necessary.

b. Carbon Dioxide Emissions from Cars - As discussed previously (Section 2.B) The Administration does not support the inclusion of carbon dioxide standards for auto emissions. The Agency is actively involved in international efforts to deal with the issue of global warming. As with the stratospheric ozone and global climate provisions included in S. 1630, the Administration believes that unilateral actions are not an effective means of safeguarding the global environment. In view of this, such provisions would unnecessarily punish national interests.

2. Municipal Waste Combustors (MWCs)

Since the Senate municipal waste combustor (MWC) provisions were originally introduced as S. 196, EPA has proposed standards to address air emissions from both new and existing incinerators. The S. 1630 MWC provisions are therefore extraneous. In fact, these provisions may be less environmentally protective than the EPA proposed program, while also being more expensive.

For example, the EPA proposed program would require both new and existing facilities to burn only waste which has been reduced in weight 25% through separation of recoverable materials for recycling. Materials separation would be an ongoing program, but flexibility is incorporated to accommodate fluctuations in market conditions.

S. 1630's recycling requirement is a one-time, preconstruction test applied only to new sources. Since the requirement only becomes effective 3 years after enactment, the substantial amount of new incinerator capacity coming on line in the next few years would be entirely exempt. In addition, the one-time nature of the recycling certification means the feasible recycling level will be

determined based on a snapshot of market conditions. This may lead to substantial underestimation of the potential for recycling over the life of the incinerator.

The S. 1630 provisions also require installation of acid gas scrubbers on all facilities, regardless of size, type, remaining service life, or other factors which may affect the reasonableness of such large capital expenditures.

G. Major S. 1630 Omissions

1. Alternative Fuels

The Administration is working to include a specific clean motor vehicle fuels program in the Senate Bill. The Administration believes it is much more cost effective and technically feasible to implement a modest clean fuels program, such as that proposed by the President, than to continue to establish more stringent car tailpipe standards. The President's program would introduce clean fueled vehicles beginning in 1995 into the cities with the worst air quality.

There are several vehicle fuels that are inherently cleaner than current gasoline, such as ethanol, methanol, natural gas, propane, and electricity. EPA projects that each of these fuels could provide approximately an 80 percent or greater reduction in ozone-forming emissions relative to a gasoline vehicle meeting the stringent future emission standards proposed in the Administration bill (Tier I standards). These fuels would also provide large reductions in cancer incidence from toxic air emissions, on the order of 90 percent or more relative to gasoline vehicles.

In order to reap the emission benefits of these clean fuels, federal guidance is necessary. An appropriate federal program must satisfy the following criteria: 1) the program should be fuel neutral, 2) there must be a match between vehicle and fuel supply, 3) fuel must be conveniently available to consumers, 4) the size of the program must be large enough to permit the utilization of economies of scale with both vehicle and fuel production, 5) the program should be temporary, just long enough to solve the chicken and egg problem of market entry which will allow the new fuel to truly compete with the conventional fuel, and 6) the program should rely on market forces as much as possible. The Administration remains firmly committed to these principles and the desirability of the alternative fuels program.

2. Structural Improvements

The nonattainment provisions of the Senate bill do not include

numerous provisions contained in the Administration bill that provide administrative improvements. These include:

- Authority for EPA, after it promulgates a new or revised national ambient air quality standard, to require a State to submit an implementation plan that simply provides for information-gathering authority and other authority needed:in the short term before submittal of a full SIP.

- Sanctions applicable to all areas for all pollutants, not only nonattainment areas with respect to certain pollutants.

- Changes to the new source review rules, including a requirement that new sources obtain offsets in order to locate in nonattainment areas that have received a SIP call.

- Add updated provisions to address remaining SIP deficiencies relating to current SO2, NO2 and lead standards.

- Numerous other technical provisions found in the Administration bill and the Lent substitute, such as deletion of obsolete and redundant conflict-of-interest provisions.

DETAILED SIDE-BY-SIDE ANALYSES

TITLES I & II

DRAFT

COMPARISON OF OZONE AND CO NON-ATTAINMENT PROVISIONS AND MOBILE SOURCE PROVISIONS CONTAINED IN:

- o Waxman Bill (H.R. 2323),
- o Administration Bill,
- o H.R. 3030, and
- o the Senate Bill (S. 1630).

January 11, 1990

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AIR QUALITY CATEGORIES AND DEADLINES

	Ozone (ppm, 1 hr. avg.)	Carbon Monoxide (ppm, 8 hr. avg.)
Waxman[1/2/8/9/]		
Moderate (4 yr. deadline)	.12 ≤ .144	9.5 ≤ 11.7
Serious (8 yr. deadline)	>.144 ≤ .18	>11.7 ≤ 14.4
Severe (12 yr. deadline)	>.18 ≤ .24	>14.4
Extreme (16 yr. deadline)[3/]	>.24	
Administration[4/5/7/]		
Marginal (12/31/95 deadline)	.13[6/]	---
Moderate (12/31/95 deadline)	.14 - .15	9.5 - 16.4
Serious (12/31/2000 deadline)	.16 - .18	≥16.5
Severe (12/31/2010 deadline)	≥.19	---
Senate[10/11/12/]		
Moderate (5 yr. deadline)	≤.144	≤14.0
Serious (10 yr. deadline)	>.144 ≤ .18	>14.0
Severe (15 yr. deadline)	>.18 ≤ .26	
Extreme (20 yr. deadline)	>.26	
H.R. 3030[4/5/7/]		
Marginal (12/31/95 deadline)	.13[6/]	---
Moderate (12/31/95 deadline)	.14 - .15	9.5 - 16.4
Serious (12/31/2000 deadline)	.16 - .18	≥16.5
Severe (12/31/2010 deadline)	≥.19	---

AIR QUALITY CATEGORIES AND DEADLINES
FOOTNOTES

1/ EPA may adjust classification if the design value is within 10% of another category. Moderate areas may not be reclassified to attainment.

2/ EPA may make a provisional determination of attainment for any area not in attainment by the applicable attainment date if the area has met the emission reduction target or if the preceding year had no more than one exceedance.

3/ EPA may grant up to a 4-year extension if the area is meeting the emission reduction target and the SIP is adequate to attain the standard by the extended attainment date.

4/ Design values with 2 significant figures reflect rounding, e.g., 0.135 is rounded to 0.14.

5/ EPA may grant up to two 1-year extensions if SIP has been fully implemented and no more than 1 exceedance has occurred. EPA may adjust classification if the design value is within 5% of the other category.

6/ Also, any current nonattainment area with a design value less than .13 ppm and any areas found to be non-self generating nonattainment areas.

7/ Except for a severe area, any area that fails to attain is reclassified to either the next higher classification or a classification based on its design value, whichever is higher.

8/ Moderate, serious, and severe areas that fail to attain the standard by the attainment date are reclassified to the next higher classification.

9/ If interim emission reductions are not met in either a serious or severe area, the state may elect to reclassify a serious area to severe and severe to extreme.

10/ Non-self generating areas are exempt from these deadlines, but must meet other generally applicable requirements.

11/ EPA has the discretion to reclassify serious and severe areas to the next higher classification if the area fails to meet interim emission reduction requirements.

12/ Moderate, serious, and severe areas that fail to attain are reclassified to the next higher classification.

SIP SUBMITTAL SCHEDULE

	Waxman	Administration	H.R. 3030	Senate
State Submittals[1/]	Compliance strategy, within 9 months Annual emission inventory for NO_x and VOC [6/]	Emission inventory of emissions from all sources.[7/]	Emission inventory of emissions from all sources.[7/]	Emission inventory of actual emissions of VOC and NO_x from all sources due 1 year from enactment.[8/] For all areas except moderate, annual reports on measures adopted or implemented the previous year.[9/]
SIP submittal[1/]	SIP revision, within 4 years of enactment.	A series of submittals between 6 months and 2000, depending on pollutant and level of classification[4/]	A series of submittals between 6 months and 2000, depending on pollutant and level of classification[4/]	A series of submittals between 6 months and 3 years from classification, depending on pollutants and classification.[10/]
EPA approval[2/]	6 months for compliance strategy;[3/] 12 months for SIP; 9 months for plan revisions due to EPA audit or reclassification.	12 months[5/]	12 months[5/]	12 months

---

1/ Months are from date of enactment.

2/ Months are from date of SIP submittal.

3/ "Moderate" areas automatically approved but approval can be reversed.

4/ All ozone nonattainment areas have submittals at 6 months from classification and two years from enactment. Moderate have another in 3 years from enactment. Serious have still others in 42 months and in 1995. Severe have still another in 2000. CO serious areas have submittals in 2 years and in 1995.

5/ EPA must determine whether SIP submittal is complete within 60 days. If incomplete, submission is treated as having never been made.

6/ First inventory is due 27 months after enactment and annually thereafter.

7/ Required within 2 years of enactment; revised inventory to be submitted every 3 years until attainment.

8/ Update every three years.

9/ The fourth report, and each third report thereafter, must demonstrate whether vehicle miles travelled and congestion levels are consistent with the attainment demonstration.

10/ All ozone nonattainment areas have submittals at 6, 12, and 18 months after classification. Moderate areas have others at 12 months. Serious areas have other submittals at 1 and 3 years. Severe and extreme areas have still others at 1 and 2 years. CO areas have submittals in 12, 18, and 24 months.

MANDATORY SIP PROVISIONS

For "Moderate" (Waxman and Senate), and "Marginal" (Administration and H.R. 3030) Nonattainment Areas

	Waxman	Administration	H.R. 3030	Senate
NSR Provisions	Offset 1.2:1	Corrections to existing SIP to extent necessary to meet EPA guidance.	Corrections to existing SIP to extent necessary to meet EPA guidance.	Offset 1.5:1
I&M	Not addressed.	Revision of program if already in place to meet EPA guidance.	Revision of program if already in place to meet EPA guidance.[3/]	State has choice of implementing either enhanced I&M program or Stage II (20,000 gal/mo capacity or more)
Low Emissions Vehicles	No requirement	No requirement	No requirement	No requirement
Percent Reduction Requirements	EPA sets percent emission reduction targets for NO_x and VOC no later than 3 years from enactment.	-----	-----	No requirement
Attainment Demonstration	Required	Not required	Not required	No requirement
Other Provisions	RACT all CTG sources and all 100 tpy non-CTG sources. All >25 tpy sources, fees not less than $50/ton VOC or NO_x to pay monitoring, inventory and permitting costs. Emission statements from VOC and NO_x sources over 25 tpy, within 2 years of enactment and annually thereafter. Annual inventory beginning 27 months after enactment. EPA to audit SIP every 2 years.	RACT to be implemented by correcting previously required provisions. Federally enforceable operating permits program with fees to cover costs of regulating major stationary sources. Inventory of actual emissions within 2 years. Update in 1996 and every 3 years thereafter.[4/] Emission statements from VOC and NO_x sources over 25 tpy, within 2 years of enactment and annually thereafter.	RACT to be implemented by correcting previously required provisions. Federally enforceable operating permits program with fees to cover costs of regulating major stationary sources. Inventory of actual emissions within 2 years. Update in 1996 and every 3 years thereafter.[4/] Emission statements from VOC and NO_x sources over 25 tpy, within 2 years of enactment and annually thereafter.	Annual fee of not less than $75/ton on major stationary VOCs, NO_x, CO or PM-10 sources. Emission fee to EPA of not less than $15/ton VOC, NO_x, CO, or PM-10 to recover costs of program. Applicable to any source liable for state/local emission fees. Auto registration fee of not less than $2.00. Fully implement current SIP provisions. RACT to be implemented by correcting all previously required provisions. Inventory of actual emissions from all VOC and NO_x sources as of calendar year of enactment. Update every 3 years. Annual emission statements from VOC and NO_x sources.[2/]

MANDATORY SIP PROVISIONS
For "Moderate" (Waxman and Senate), and "Marginal" (Administration and H.R. 3030) Nonattainment Areas

	Waxman	Administration	H.R. 3030	Senate
Other Provisions (continued)				Federally enforceable permit for construction and operation of major stationary sources with fees to cover costs of regulating major stationary sources.

MANDATORY SIP PROVISIONS
For "Moderate" (Waxman and Senate),
and "Marginal" (Administration and H.R. 3030) Nonattainment Areas
FOOTNOTES

1/ If the state already has an I&M program in place, the enhanced I&M program must be implemented. Enhanced I&M must achieve at least a reduction of 4,700 tons VOC per million vehicles. Areas less than .13 ppm (in year preceding enactment) are not required to implement either I&M or Stage II programs unless these measures are necessary for attainment. EPA can waive the Stage II requirements if on-board control systems are in widespread use.

2/ State may waive this requirement for sources under 25 tpy of VOC or NO_x providing the class or category is included in the state's emission inventory according to specific guidelines.

3/ EPA must review, update, and republish in the Federal Register, guidance to states on motor vehicle I&M programs, including provisions to ensure that vehicles retested after failure provide proof of corrective action and that vehicle registration be denied in the case of tampering or misfueling.

4/ The state may waive the update of the emission inventory for any class of category of stationary sources emitting less than 25 tons per year of VOC or NO_x if the state submits, instead, an inventory for these sources based on EPA's emission factors, or other acceptable method.

MANDATORY SIP PROVISIONS

For "Serious" (Waxman and Senate), and "Moderate" (Administration and H.R. 3030) Nonattainment Areas

	Waxman	Administration	H.R. 3030	Senate
NSR Provisions	25 tpy cutoff (VOC & NO_x) 1.3:1 offsets Increases of 10 tpy or less from modifications do not trigger NSR	Corrections to existing SIP to extent necessary to meet EPA guidance.	Corrections to existing SIP to extent necessary to meet EPA guidance.	1.5:1 offsets Major sources defined as 25 tpy or more VOC's.
I&M	Enhanced[1/2/]	Revision of program already in place to meet EPA guidance.	Revision of program already in place to meet EPA guidance.	Enhanced
Low Emissions Vehicles	All buses acquired after 1/1/92 by state or local government.	Not addressed.	Not addressed.	Not addressed.
Percent Reduction Requirements	EPA to set NO_x and VOC emission reduction targets; for VOC, not less than 30%[5/] 4 yr. 20% emission reduction milestone. NO_x trading prohibited.	15% VOC emission reduction from baseline by 12/31/95[3/] Reductions from Federal Mobile Vehicle Control programs, RVP regulations, I&M, or SIP corrections do not count in baseline or 15% reduction. NO_x trading prohibited.	15% VOC emission reduction from baseline by 12/31/95[3/] Reductions from Federal Mobile Vehicle Control programs, RVP regulations, I&M, or SIP corrections do not count in baseline or 15% reduction. NO_x trading prohibited.	12% VOC emission reduction, averaged over each consecutive 3 yr period, until attainment is achieved[7/] All reductions are creditable except for reductions from new RVP requirements. NO_x trading.[11/]
Attainment Demonstration	Required	Not required	Not required	Required
Stage II	Required[6/]	Required[4/]	Required[4/]	Required[8/]
Other Provisions	RACT all CTG sources and all 100 tpy non-CTG sources. All >25 tpy sources, fees not less than $50/ton, VOC or NO_x for monitoring, inventory and permitting costs. Emission statements from VOC and NO_x sources over 25 tpy, within 2 years of enactment and annually thereafter. Annual inventory beginning 27 months after enactment.	RACT, VOC sources over 100 tpy or with CTG's Federally enforceable operating permits program with fees to cover costs of regulating major stationary sources. Inventory of actual emissions within 2 years. Update in 1996 and every 3 years thereafter. Emission statements from VOC and NO_x sources over 25 tpy annually.	RACT, VOC sources over 100 tpy or with CTG's Federally enforceable operating permits program with fees to cover costs of regulating major stationary sources. Inventory of actual emissions within 2 years. Update in 1996 and every 3 years thereafter. Emission statements from VOC and NO_x sources over 25 tpy annually.	RACT on all non-CTG sources 25 tons or more VOC and 100 tons or more NO_x[9/] Annual fee of not less than $75/ton on major stationary VOC, NO_x, CO, or PM-10 sources. Emission fee to EPA of not less than $15/ton VOC, NO_x, CO, or PM-10 to recover costs of program. Applicable to any source liable for state/local emission fees.

MANDATORY SIP PROVISIONS
For "Serious" (Waxman and Senate), and "Moderate" (Administration and H.R. 3030) Nonattainment Areas
(continued)

	Waxman	Administration	H.R. 3030	Senate
Other Provisions (continued)	EPA to audit SIP every 2 years. Includes all preceding requirements for moderate areas.	Includes all preceding requirements for marginal areas.	Includes all preceding requirements for marginal areas.	Federally enforceable permit for construction and operation of major stationary sources with fees to cover costs of regulating major stationary sources. Inventory of actual emissions (in year of enactment) of VOC's and NO_x from all sources within the MSA or CMSA plus a 25 mile radius; update every 3 years. Annual report on measures adopted and implemented. A transportation control program is to be implemented if VMT and congestion are greater than projected to achieve 3 yr emission reductions.[10/] $5,000/ton fee (adjusted for inflation) for failure to attain on VOC emissions from major VOC sources over 50% of actual in year area was to attain. Auto registration fee of not less than $2.00. Includes all preceding requirements for moderate areas.

MANDATORY SIP PROVISIONS
For "Serious" (Waxman and Senate), and "Moderate" (Administration and H.R. 3030) Nonattainment Areas

FOOTNOTES

1/ EPA's enhanced I&M if required would allow choice of measures, with a target overall performance level. See page 20 for more details on EPA and Congressional definitions of enhanced I&M.

2/ Can opt out of enhanced I&M in ozone non-attainment areas, if substitute with basic I&M and supplementary mobile source measures (e.g., TCMs, low emission vehicles).

3/ Baseline is estimated from total actual VOC emissions in the year of enactment. No credit for reductions due to federal vehicle control program, SIP corrections required by prior EPA guidance, RVP regulations, or basic I&M.

4/ For "new" facilities, Stage II is to be implemented within 6 months after state adopts rule; within 1 year for facilities with 100,000 gallons or greater capacity (avg. mo. sales); or within 2 years for all others.

5/ EPA may reduce the emission reduction target to the extent that the state reduces VOC emissions by more than 10%; EPA may also increase the emission reduction target to the extent the state achieves less than a 10% reduction in VOC emissions.

6/ Applies only to facilities that sell greater than 10,000 gallons per month (50,000 gallons per month for small business marketers). If on-board emission control systems are required, EPA may revise or waive Stage II requirements.

7/ Emission reductions in excess of 12% may be credited toward the next reduction period.

8/ Applies only to facilities that sell greater than 20,000 gallons per month. EPA may revise or waive the Stage II requirements if on-board emission control systems are determined to be in widespread use.

9/ RACT revisions must achieve VOC reductions of 80% or more from uncontrolled levels unless such level is not technically or economically feasible. Reductions must equal the maximum feasible.

10/ Every third annual report (starting with the fourth) is to include a demonstration of VMT and congestion to determine the need for a transportation control program.

11/ Reductions in emissions of NO_x (except those attributable to Federal motor vehicle standards) may be substituted for required VOC reductions at no less than a one-for-one ratio, providing the reductions provide equivalent ozone reduction to the 12% VOC reduction.

MANDATORY SIP PROVISIONS
For "Serious" Nonattainment Areas

	Waxman	Administration	H.R. 3030	Senate
NSR Provisions	25 tpy cutoff (VOC & NO_x) 1.3:1 offsets Increases of 10 tpy or less from modifications do not trigger NSR	Corrections to existing SIP to extent necessary to meet EPA guidance.	Corrections to existing SIP to extent necessary to meet EPA guidance.	1.5:1 offsets Major sources defined as 25 tpy or more VOC's
I&M	Enhanced[1/2/]	Enhanced	Enhanced	Enhanced
Low Emissions Vehicles	All buses acquired after 1/1/92 by state or local government.	Phase-in of clean-fuel vehicles in areas at 0.18 ppm.[3/] State must make clean fuel economic for vehicle owners.	Manufacturers must certify capacity to produce, distribute, and offer for sale clean fuel vehicles. State must make clean fuel economic for vehicle owners.[14/15/16/]	Not addressed.
Percent Reduction Requirements	EPA to set NO_x and VOC emission reduction targets; for VOC, not less than 30% 4 yr. 20% emission reduction milestone	15% VOC emission reduction from baseline by 12/31/95, and thereafter minimum average annual VOC reduction of 3% per year averaged over each 3 year period.[4/7/8/13/]	15% VOC emission reduction from baseline by 12/31/95, and thereafter minimum average annual VOC reduction of 3% per year averaged over each 3 year period.[4/7/8/13/]	12% VOC emission reduction, averaged over each consecutive 3 yr period, until attainment is achieved[9/] All reductions are creditable except for reductions from new RVP requirements.
Attainment Demonstration	Required	Required	Required	Required
Stage II	Required	Required[5/]	Required[5/]	Required[10/]
Other Provisions	RACT all CTG sources and all 100 tpy non-CTG sources. All >25 tpy sources, fees not less than $50/ton, VOC or NO_x for monitoring, inventory and permitting costs. Emission statements from VOC and NO_x sources over 25 tpy, within 2 years of enactment and annually thereafter. Annual inventory beginning 27 months after enactment.	RACT, VOC sources over 100 tpy or with CTG's Transportation control program[6/] Inventory of actual emissions within 2 years. Update in 1996 and every 3 years thereafter. Emission statements from VOC and NO_x sources over 25 tpy annually. Federally enforceable operating permits program with fees to cover costs of regulating stationary sources.	RACT, VOC sources over 100 tpy or with CTG's Transportation control program[17/] Inventory of actual emissions within 2 years. Update in 1996 and every 3 years thereafter. Emission statements from VOC and NO_x sources over 25 tpy annually. Federally enforceable operating permits program with fees to cover costs of regulating stationary sources.	RACT on all non-CTG sources 25 tons or more VOC, and 100 tons or more NO_x[11/] Annual fee of not less than $75/ton on major stationary VOC, NO_x, CO, or PM-10 sources. Emission fee to EPA of not less than $15/ton VOC, NO_x, CO, or PM-10 to recover costs of program. Applicable to any source liable for state/local emission fees. Inventory of actual emissions (in year of enactment) of VOC's and NO_x from all sources within the MSA or CMSA plus a 25 mile radius; update every 3 years.

MANDATORY SIP PROVISIONS
For "Serious" Nonattainment Areas

	Waxman	Administration	H.R. 3030	Senate
Other Provisions (continued)	EPA to audit SIP every 2 years. Use of clean fuels as a reasonably available control measure, where appropriate. All ≥ 50 tpy sources of VOC or NO_x must obtain state operating permits within 2½ yrs after enactment. Includes all preceding requirements for Moderate areas.	Includes all preceding requirements for Moderate areas.	Includes all preceding requirements for Moderate areas.	Federally enforceable permit for construction and operation of major stationary sources with fees to cover costs of regulating major stationary sources. Annual report on measures adopted and implemented. A transportation control program is to be implemented if VMT and congestion are greater than projected to achieve 3 %/yr emission reductions.[12/] $5,000/ton fee (adjusted for inflation) for failure to attain on VOC emissions from major VOC sources over 50% of actual in year area was to attain. Auto registration fee of not less than $2.00. Includes all preceding requirements for Moderate areas.

MANDATORY SIP PROVISIONS
For "Serious" Nonattainment Areas
FOOTNOTES

1/ EPA's enhanced I&M if required would allow choice of measures, with a target overall performance level. See page 18 for more details on EPA and Congressional definitions of enhanced I&M.

2/ Can opt out of enhanced I&M in ozone non-attainment areas, if substitute with basic I&M and supplementary mobile source measures (e.g., TCMs, low emission vehicles).

3/ Nationwide 500,000 vehicles in '95; 750,000 - '96; 1,000,000 annually - '97 to 2004. States may opt out of all or part of clean-fuel requirements by achieving emission reductions equivalent to applicable clean-fuel performance standards.

4/ Beginning 1/1/96 until attainment date; averaged over each 3-year period.

5/ For "new" facilities, Stage II is to be implemented within 6 months after state adopts rule; within 1 year for facilities with 100,000 gallons or greater capacity (avg. mo. sales); or within 2 years for all others.

6/ If EPA determines VMT or congestion exceeds SIP estimations, State must implement VMT reduction plan or offset increases with alternative measures.

7/ In lieu of the 3% per year VOC reduction requirement, states may control NO_x and VOCs to the extent that resulting reductions in ozone concentrations are equivalent. Less than 3% acceptable if all feasible measures are taken.

8/ Baseline is estimated from total actual VOC emissions in the year of enactment. No credit for reductions due to federal vehicle control program, SIP corrections required by prior EPA guidance, RVP regulations, or measures concerning basic I&M.

9/ Emission reductions in excess of 12% may be credited toward the next reduction period. Reductions in emissions of NO_x (except those attributable to Federal motor vehicle standards) may be substituted for required VOC reductions at no less than a one-for-one ratio, providing the reductions provide equivalent ozone reduction to the required 12% VOC reduction.

10/ Applies only to facilities that sell greater than 20,000 gallons per month. EPA may revise or waive the Stage II requirements if on-board emission control systems are determined to be in widespread use.

11/ RACT revisions must achieve VOC reductions of 80% or more from uncontrolled levels unless such level is not technically or economically feasible. Reductions must equal the maximum feasible.

12/ Every third annual report (starting with the fourth) is to include a demonstration of VMT and congestion to determine the need for a transportation control program.

13/ Reductions from the Federal Mobile Vehicle control programs, RVP regulations, SIP correction required by prior EPA guidance, or I&M measures do not count in the baseline or 15% reduction.

14/ Applicable to areas with an ozone design value at or above 0.18 ppm, having a 1980 population of 250,000 or more unless EPA has already approved a state program replacing the clean fuel program. Governor may request any other areas for inclusion in program.

15/ Manufacturers must certify capacity to produce, distribute, and offer to sell clean fuel vehicles (subject to availability of fuel) as follows: 500,000 vehicles in MY 1995; 750,000 in MY 1996; 1,000,000 per year in MY 1997 through 2004.

16/ States may opt out of all or part of clean fuel requirements by achieving emission reductions equivalent to applicable clean fuel standards.

17/ If EPA determines VMT or congestion exceeds SIP estimations, state must implement VMT reduction plan or offset increases with alternative measures. Reduction plan must include measures to reduce congestion to greatest extent feasible, including reduction in rate of increase in passenger vehicle trips and miles per trip.

MANDATORY SIP PROVISIONS

For "Severe"/"Extreme" (Waxman and Senate) and "Severe" (Administration and H.R. 3030) Nonattainment Areas

	Waxman	Administration	H.R. 3030	Senate
NSR Provisions	10 tpy cutoff (NO_x or VOC) 1.5:1 offsets. No netting	Corrections to existing SIP to extent necessary to meet EPA guidance.	Corrections to existing SIP to extent necessary to meet EPA guidance.	2:1 Offsets Major source: Severe - 25 tpy VOC Extreme - 10 tpy VOC
I&M[1/]	Enhanced	Enhanced	Enhanced	Enhanced
Low Emission Vehicles	SEVERE 30% of new[2/] vehicles, '98; SEVERE/EXTREME 15 vehicle fleets, new, '93 EXTREME % new low emission vehicles: 10%-'94; 30%-'96; 70%-'98; 100%-2000	Phase-in of clean-fuel vehicles[3/] State must make clean fuel economic for vehicle owners.	Manufacturers must certify capacity to produce, distribute, and offer to sell clean-fuel vehicles.[13/14/15/] State must make clean fuel economic for vehicle owners.	Not required.
Percent Reduction Requirements	EPA to set VOC and NO_x % emission reduction targets, not less than 50% VOC for severe, 70% for extreme 4 yr, 8 or 12 yr additional emission reduction milestones	15% VOC emission reduction from baseline by 12/31/95; thereafter, minimum average annual reduction of 3% per year averaged over each 3 year period.[5/6/12/] Oxygenated fuel requirement in CO nonattainment areas[7/]	15% VOC emission reduction from baseline by 12/31/95; thereafter, minimum average annual reduction of 3% per year averaged over each 3 year period.[5/6/12/] Oxygenated fuel requirement in CO nonattainment areas[7/]	12% VOC emission reduction, averaged over each consecutive 3 year period until attainment is achieved.[8/] All reductions are creditable except for reductions from new RVP requirements.
Attainment Demonstration	Required	Required	Required	Required
Stage II	Required	Required	Required	Required[9/]
Emission Fees	All >25 tpy sources, fees not less than $50/ton to pay monitoring, inventory and permitting costs.	Emissions fees for failure to attain.[4/] Federally enforceable operating permit fees to cover costs of regulating stationary sources.	Emissions fees for failure to attain.[4/] Federally enforceable operating permit fees to cover costs of regulating stationary sources.	Annual fee of not less than $75/ton on major stationary VOC, NO_x, CO, or PM-10 sources. Emission fee to EPA of not less than $15/ton VOC, NO_x, CO, or PM-10 to recover costs of program. Applicable to any source liable for state/local emission fees. $5,000/ton fee (adjusted for inflation) for failure to attain on VOC emissions from major VOC sources over 50% of actuals in year area was to attain.

MANDATORY SIP PROVISIONS
For "Severe"/"Extreme" (Waxman and Senate) and "Severe" (Administration and H.R. 3030) Nonattainment Areas
(continued)

	Waxman	Administration	H.R. 3030	Senate
Other Provisions	EXTREME Clean fuel or advanced control technology on 25 tpy NO_x boilers, effective 8 years after enactment[2/]	Transportation control program[16/]	Transportation control program[16/]	Federally enforceable permit for construction and operation of major stationary sources with fees to cover costs of regulating major stationary sources.
	Operating permit for 25+ tpy sources of NO_x or VOC (severe), and 10 tpy (extreme).	RACT, all VOC sources over 100 tpy	RACT, all VOC sources over 100 tpy	RACT all non-CTG sources 25 tons/year or more VOC and 100 tons or more NO_x[10/]
	Each new gasoline storage tank must be capable of storing methanol (severe/extreme).	Inventory every 3 years	Inventory every 3 years	Boundaries of extreme areas are to include the MSA or CMSA plus a radius of 25 miles
	No federal transportation funds to be used unless transportation planning includes all reasonably available techniques.	Annual emission statements from NO_x and VOC sources over 25 tpy	Annual emission statements from NO_x and VOC sources over 25 tpy	Adoption of enforceable strategies and transportation measures to offset growth in VMT or number of vehicle trips
	No bubbling out of RACT.	Includes all preceding requirements for serious areas.	Includes all preceding requirements for serious areas.	Employer transportation program to reduce work-related vehicle trips[11/]
	Plus same provisions as for serious areas unless more stringent for severe or extreme.			Inventory of actual emissions (in year of enactment) of VOC's and NO_x from all sources within MSA or CMSA plus a 25 mile radius; update every 3 years.
	Includes all preceding requirements for serious areas.			Annual report on measures adopted and implemented.
				Auto registration fee of not less than $2.00.
				Includes all preceding requirements for serious areas.

MANDATORY SIP PROVISIONS
For "Severe"/"Extreme" (Waxman and Senate) and "Severe" (Administration and H.R. 3030) Nonattainment Areas
FOOTNOTES

1/ EPA's enhanced I&M if required would allow choice of measures, with a target overall performance level. See page 18 for more details on EPA and Congressional definitions of enhanced I&M.

2/ Ozone nonattainment areas only.

3/ Vehicles sales requirements begin in 1995 (500,000 nationwide) and rise to 1 million annually after 1996. State may opt out of program if additional equivalent measures are used.

4/ For major sources, $5,000 per ton VOC in excess of 80% of actuals or allowed in attainment year.

5/ Beginning 1/1/96 until attainment date; averaged over each 3-year period. Submit attainment demonstration incorporating emission reductions by 12/31/2000.

6/ In lieu of the 3% per year VOC reduction requirement, states may control NO_x and VOCs to the extent that resulting reductions in ozone concentrations are equivalent. Less than 30% acceptable if all feasible measures are taken.

7/ By 10/1/93, fuels in serious and severe CO nonattainment areas must contain a to-be-specified level of oxygen during high CO concentration portions of the year. States may opt out of this requirement if it can be demonstrated the measure is not necessary for attainment.

8/ Emission reductions in excess of 12% may be credited towards the next reduction period. Reductions in emissions of NO_x (except those attributable to Federal motor vehicle standards) may be substituted for required VOC reductions at no less than a one-for-one ratio, providing the reductions provide equivalent ozone reduction to the required 12% VOC reduction.

9/ Applies only to facilities that sell greater than 20,000 gallons per month. EPA may revise or waive the Stage II requirements if on-board emission control systems are determined to be in widespread use.

10/ RACT revisions must achieve VOC reductions of 80% or more from uncontrolled levels unless such level is not technically or economically feasible. Reductions must equal the maximum feasible.

11/ At minimum, employers of 100 or more must increase vehicle occupancy to and from work at least 25% above area average. EPA may specify occupancy rates. Employers must submit compliance plans demonstrating compliance no later than 4 years from submittal of plan. A less than 25% vehicle occupancy rate increase is acceptable if cost to employer in implementing the plan is equal to or greater than cost of parking provided for each employee, or if compliance is not feasible at this cost.

12/ Reductions from the Federal Mobile Vehicle control programs, RVP regulations, SIP corrections required by prior guidance, or basic I&M measures do not count in the baseline or 15% reduction.

13/ Applicable to areas with an ozone design value at or above 0.18 ppm, having a 1980 population of 250,000 or more unless EPA has already approved a state program replacing the clean fuel program. Governor may request any other areas for inclusion in program.

14/ Manufacturers must certify capacity to produce, distribute, and offer to sell clean fuel vehicles (subject to availability of fuel) as follows: 500,000 vehicles in MY 1995; 750,000 in MY 1996; 1,000,000 per year in MY 1997 through 2004.

15/ States may opt out of all or part of clean fuel requirements by achieving emission reductions equivalent to applicable clean fuel standards.

16/ If EPA determines VMT or congestion exceeds SIP estimations, state must implement VMT reduction plan or offset increases with alternative measures. Reduction plan must include measures to reduce congestion to greatest extent feasible, including reduction in rate of increase in passenger vehicle trips and miles per trip.

SIP MANAGEMENT REQUIREMENTS

	Waxman	Administration	H.R. 3030	Senate
Air Quality Maintenance Planning Horizon	SIP must address next 20 years	At least ten years	At least ten years	Maintenance plans must address 20 years and be updated after 10 years.
Audits of Progress	Revised plans audited every 2 years	-----	----	Plan may undergo annual audit as a sanction if area fails to achieve required emission reductions. EPA shall, at any time SIP is found to be substantially inadequate, require states to revise plan.

SANCTIONS AND THEIR TRIGGERS

Triggers	Waxman	Administration	H.R. 3030	Senate
SIP not submitted on schedule	(a),(b),(i)	(b)[2/],(d),(e),(f)[1/]	(b)[2/],(d),(e),(f)[1/]	(b),(d),(f)[3/]
SIP disapproved	(a),(b),(i)	(b),(d),(e),(f)[1/]	(b),(d),(e),(f)[1/]	(b),(d),(f)[3/]
SIP not implemented	(a),(b),(i)	(d),(e),(f)[1/]	(d),(e),(f)[1/]	(b),(d),(f)[3/]
Interim reductions not met	(j)			(b),(d),(l),(m),(n)
Failure to attain by deadline	(c)	(g),(h)	(g),(h)	(k),(o)
Failure of EPA to Act	(a)	----	----	----

1/ At least one of the sanctions is to be applied upon EPA finding that reasonable efforts are not being made. Subsequent determination of reasonable efforts within 12 months. Additional sanctions may be added if reasonable efforts still not being made. Sanctions may be lifted at that time if efforts are positive, except that EPA must apply one or more of the sanctions if SIP submittal is more than 18 months overdue.

2/ This sanction may be applied no more than once in consecutive 5-years periods.

3/ The withholding of air quality grants, in whole or part, is optional.

Applicable Sanctions

(a) 3:1 NSR offset ratio

(b) No DOT highway funds except safety, mass transit and air quality

(c) Move up moderate to serious, serious to severe, severe to extreme; if already extreme, 3:1 offsets imposed and economic incentives plus other measures necessary to reduce total NO_x and VOC's by 5% per year until attainment.

(d) Construction ban

(e) Ban on drinking water hook-ups

(f) Conditions placed on air quality grants

(g) In severe ozone nonattainment areas, $5,000/ton fee (adjusted for inflation) on VOCs emitted in excess of 80% of the specified baseline allowed amount.

(h) Reclassified to next higher class or one reflected by current levels, whichever is higher.

(i) EPA may require sources of NO_x or VOC to pay assessment equal to the average marginal cost of controlling the pollutants.

(j) For serious and severe areas, state may elect to either reclassify area upward (serious to severe, severe to extreme) or implement additional measures determined by EPA (serious) or implement an economic incentive program (severe). For extreme areas, the state must submit an economic incentive program.

(k) In serious, severe, and extreme areas, $5,000/ton fee (adjusted for inflation) on VOC's emitted in excess of 50% of actuals in year area was to attain.

(l) Annual audit, until reductions are achieved, of the SIP to determine why the required reductions are not being met.

(m) Assure that RACT is implemented on 25 ton VOC and 100 ton NO_x sources (as required for serious areas).

(n) EPA also may lower the major source threshold and/or require the area to meet severe requirements (or extreme, if already severe).

(o) Reclassified to next higher classification.

FIPS AND THEIR TRIGGERS

	Waxman	Administration	H.R. 3030	Senate
Provisions	Not addressed	FIPs are discretionary. EPA may promulgate FIP, or partial FIP, after finding that State has failed to submit SIP, SIP does not meet criteria, or SIP is disapproved. EPA must decide to promulgate FIP after finding that State failed to make reasonable efforts, taking into consideration practicality of FIP and severity of nonattainment problem.	FIPs are discretionary. EPA may promulgate FIP, or partial FIP, after finding that State has failed to submit SIP, SIP does not meet criteria, or SIP is disapproved. EPA must decide to promulgate FIP after finding that State failed to make reasonable efforts, taking into consideration practicality of FIP and severity of nonattainment problem.	EPA must promulgate FIP, or portion thereof, within 3 years after EPA imposes sanction for failure to submit all or part of a SIP. EPA also has discretion to promulgate FIP (or portion of FIP) at any time (after notice and comment) if State fails to submit plan, plan is not in accordance with requirements, or plan is not implemented.
FIP Requirements		FIP must result in at least significant progress towards meeting requirements of the Act.	FIP must result in at least significant progress towards meeting requirements of the Act.	Must meet all requirements of the Act except that inclusion of an attainment demonstration may be delayed up to 3 years after initial proposal. EPA may approve a state plan in lieu of FIP if all requirements are met by the state plan.

NEW CTGs

	Waxman	Administration	H.R. 3030	Senate
Categories	Any 12 determined to be most significant contributors to ozone formation	Any additional 7 VOC categories.	Any additional 11 VOC categories. EPA may publish any additional CTG's as deemed necessary.	At least 12 categories determined to make the most significant contribution to formation of ozone pollution. Also, marine vessels (loading/unloading of petroleum products).
Deadlines	Name in 6 months and divide into groups of 3. Complete each group every 18 months until all done. Review and update CTGs within 3 years of enactment and every 4 years thereafter.	Within 3 years from enactment.	Within 3 years from enactment. EPA must review and, if necessary, update CTG's, including those issued previously.	Categories divided into groups of 4. First group published within 18 months after publication and at least one other group every 18 months thereafter until completed. Review and update within 36 months and every 4 years thereafter. Marine vessel CTG within 2 years after enactment.
Default Provisions	Sources >10 tpy must within 2 years (after scheduled publication) reduce VOC emissions to 10% of uncontrolled levels.	----	----	----

FEDERAL LIMITS ON OTHER VOC SOURCES

	Waxman	Administration	H.R. 3030	Senate
Sources	Specific categories*	Consumer or commercial products. Marine vessels.	Consumer or commercial products. Marine vessels.	Consumer or commercial products.
Deadline	List of categories within 2 years, divided into 5 groups by priority. Standards promulgated for first group within 3 years and each additional group every 2 years for next 8 years.	Consumer/commercial product study due to Congress within 2 years. 3/ Regulations may be promulgated at EPA's discretion. 4/ Marine vessel standards promulgated within 4 yrs.	Consumer/commercial product study due to Congress within 2 years; 5/ EPA must promulgate regulations as deemed necessary. 6/ Marine vessel standards promulgated within 4 yrs.	Final report to Congress due 2 years after enactment; promulgate regulations within 2 years of submitting report. 2/
Nature of Regulation	"Lowest feasible emission rate," costs considered.	For consumer/commercial products - emission reductions equivalent to reasonably available controls. 1/ Marine vessel standards to consider cost, safety and environmental impacts.	For consumer/commercial products - emission reductions equivalent to reasonably available controls. 1/ Marine vessel standards to consider cost, safety and environmental impacts.	Emission reductions equivalent to reasonably available controls; must achieve, (within 3 years after promulgation) nationwide VOC reductions of 3% below level in the year of enactment.

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* Commercial and consumer solvents, architectural coatings, pesticides, traffic coatings, military coatings.

1/ May include combination of registration, monitoring requirements, fees or economic incentives.

2/ May include any combination of registration, labeling, self-monitoring, reporting, prohibitions, limitations or fees concerning manufacture, processing, distribution, use, consumption, or disposal. Health-use products may be exempted if EPA determines no suitable substitutes exist.

3/ Report must list classes or categories of commercial and consumer products and evaluate various alternative regulatory approaches such as fees, marketable permits, and auctions.

4/ May include any system of regulation including (but not limited to) registration, labeling, self-monitoring, reporting, prohibitions, limitations, fees, other economic incentives (such as marketable permits and auctions of emission rights) concerning the manufacture, processing distribution, use, consumption, or disposal of the product. Health-use products may be exempted if EPA determines no suitable substitutes exist.

5/ Report must list classes or categories of commercial and consumer products and evaluate various alternative regulatory approaches such as fees, charges, marketable permits, and auctions.

6/ May include any system of regulation including (but not limited to) registration, labeling, self-monitoring, reporting, prohibitions, limitations, reasonable fees, charges, other economic incentives (such as marketable permits and auctions of emission rights) concerning the manufacture, processing distribution, use, consumption, or disposal of the product. Health-use products may be exempted if EPA determines no suitable substitutes exist. Any fees or charges must be related to recovery of costs related to these regulations.

OZONE TRANSPORT REGIONS

Designated Regions	Waxman 11 northeastern States and D.C.	Administration 11 northeastern States and D.C.	H.R. 3030 11 northeastern States and D.C.	Senate 11 northeastern States, D.C. and Virginia
Roles/Responsibilities				
• Appoint the Commission	EPA[1/]	EPA[1/]	EPA[1/]	EPA[1/]
• Commission members	1 from each state; 1 from each EPA regional office; 1 from EPA Headquarters.[3/]	1 from each state; 1 from each EPA regional office; 1 from EPA Headquarters.[4/]	1 from each state; 1 from each EPA regional office; 1 from EPA Headquarters.[4/]	1 from each state; 1 from each EPA regional office; 1 from EPA Headquarters.[3/]
• SIP requirements	Meet "serious" area requirements except attainment dates and emission reduction targets[2/]	Controls to be recommended by transport commissions; EPA may require SIPs to include recommended controls.	Controls to be recommended by transport commissions; EPA may require SIPs to include recommended controls.	Attainment areas must implement I&M in MSA's of 100,000 or more; RACT, Stage II[6/7/]
• Require States to revise SIP's	States must submit SIP revision within 4 years after enactment.	EPA, upon petition by Commission.	EPA, upon petition by Commission. Commission meetings are to be open to public and subject to notice.	States must submit SIP or SIP revision within 2 years after enactment.
• Exempt States or areas from Region	EPA (based on State petition)	EPA, upon petition by State, or recommendation of commission	EPA, upon petition by State, or recommendation of commission	EPA, upon written comment from Commission, and Federal Register notice; determination within 9 months[5/8/]
• Add States or areas	EPA by petition or own initiative	EPA upon petition by State or recommendation of commission	EPA upon petition by State or recommendation of commission	EPA, or by petition of state or political subdivision
• Create new regions	EPA	EPA, or upon petition by State	EPA, or upon petition by State	EPA
Exemption Criteria	Any area may be exempted if stationary or mobile sources do not contribute significantly to ozone levels in serious, severe, or extreme areas.	If emissions do not contribute significantly to nonattainment of the region.	If emissions do not contribute significantly to nonattainment of the region.	Any area may be exempted if stationary or mobile sources do not contribute significantly to ozone levels in serious, severe, or extreme areas

OZONE TRANSPORT REGIONS

FOOTNOTES

1/ Transport commissions are to be appointed for each region.

2/ Applicable to areas other than serious, severe, or extreme.

3/ Decisions by majority vote; EPA Regional office members do not vote.

4/ Decisions by majority vote; State members only may vote.

5/ EPA may exempt areas from one or more of the requirements if the state can demonstrate that stationary or mobile sources do not contribute to nonattainment in any other area in the region. No state that is entirely attainment is to be subject to the requirements for transport regions, unless EPA determines it is necessary for attainment in adjoining areas, or at the discretion of the Governor of the state in attainment.

6/ If necessary for attainment, the commission may require additional controls upon petition by the state. Any additional control measures must be submitted to EPA as SIP revisions (with opportunity for public comment) for approval or disapproval of whole or part, after consultation with Commission.

7/ RACT required for all VOC sources covered by a CTG, NO_x sources covered by a CTG issued after enactment, and all VOC sources not covered by a CTG with potential to emit 100 tons or more.

8/ Commission has authority to remove any state or portion thereof, from the transport region.

MOTORCYCLE EMISSIONS LIMITS

	Waxman	Administration	H.R. 3030	Senate
HC (gpm)				
below 700 cc ('92-)	2.0 gpm	----	----	----
700 cc & up ('92-)	3.6 gpm	----	----	----
Evap. (gram/test)				
below 700 cc ('92-)	2.0 gpm	----	----	----
700 cc & up ('92-)	4.0 gpm	----	----	----
CO (gpm) ('92-)	17.6 gpm	----	----	----

PASSENGER VEHICLE EMISSIONS LIMITS

	Waxman	Administration[6/]	H.R. 3030[6/]	Senate
LDV Weight1/	<3750 lbs[2/]	≤ 3,750	≤ 3,750	≤ 3,750
Limit, HC & NMHC	HC Cert. & In-Use: .25 gpm '93-'99 .125 gpm, 2000-	HC Cert: 0.25 gpm, phased[3/] In-use: 0.32 gpm, '93,'94 0.25 gpm '95-'97[9]	NMHC Cert: 0.25 gpm, (5 yr./ 50,000 mi.) 0.31 gpm (10 yr./ 100,000 mi.), phased[13.] In-use: 0.32 gpm, '94-'97,[14/] 0.25 gpm (5 yr./ 50,000 mi.) 0.31 gpm (7 yr./ 75,000 mi.), phased[15/] Pending: 0.125 gpm16/	HC Cert. & In-Use: .31 gpm, '93-2002 .125 gpm, 2003+ NMHC Cert. & In-Use: 0.25 gpm, '93-2002
Limit, CO	Cert. & In-Use: 3.4 gpm, '92- 1.7 gpm, 2000-	Cold start[4/]	Cold start[4/] Cert: 3.4 gpm (5 yr./ 50,000 mi.) 4.2 gpm (10 yr./ 100,000 mi.), phased[13/] In-use: 5.2 gpm, '94-'97,[14/] 3.4 gpm (5 yr./ 50,000 mi.) 4.2 gpm (7 yr./ 75,000 mi.) phased[15/] Pending: 1.7 gpm[16/]	Cold start[10/] Cert. & In-Use: 1.7 gpm, 2003+
Limit, NO_x	Cert & In-Use: 0.4 gpm '93-'99 0.2 gpm, 2000-	Cert. & In-Use: 0.7 gpm, phased[5/]	Cert. & In-Use: 0.4 gpm, phased[17/] Pending: 0.2 gpm[16/]	Cert. & In-Use: 0.4 gpm, '93-2002 0.2 gpm, 2003+ Diesel 1.0 gpm, '91-2002 0.7 gpm, 2003+

PASSENGER VEHICLE EMISSIONS LIMITS
(continued)

	Waxman	Administration[6/]	H.R. 3030[6/]	Senate
Limit, Part.	Cert. & In-Use: 0.08 gpm, '92-		Cert. & In-Use: 0.08 gpm, phased[17/]	Cert. & In-Use: 0.08 gpm, '93+ (diesel)
Limit, CO_2	----	----	----	Cert. & In-Use: 266 gpm (~30 mpg), MY '96-99 220 gpm (~36 mpg), MY 2000+
Useful Life	50,000 mi. 95+ - 100,000 mi. or 10 years	50,000 mi.,	50,000 mi. Onboard controls within 4 years of enactment; 95% efficiency.	5 yrs/50,000 mi., MY '94 or before 10 yrs/100,000 mi., MY '95+
Refueling	Onboard controls within 3 years of enactment, 95% efficiency; Stage II in all but moderate areas	Stage II required in all nonattainment areas except marginal.	Stage II required in all nonattainment areas except marginal. Not applicable in mod. areas after onboard stds. in place. EPA may waive/revise Stage II requirement in serious or severe areas.	Onboard, MY '93+, 95% efficiency
On-Board Diagnostics	Within 18 months, EPA to promulgate requirements for on-board diagnostics[7/]	EPA may promulgate regulations requiring diagnostics	EPA must promulgate regulations requiring diagnostics	Within 18 months, EPA to promulgate regulations for diagnostics beginning MY '94.[11/]
Vehicle Evaporative Controls	18 months after enactment, EPA to require best available technology	EPA may promulgate regulations on evaporative control[8]	EPA must promulgate regulations on evaporative control[8/]	18 months after enactment, EPA to promulgate regulations for evaporative controls beginning MY '94[12/]

PASSENGER VEHICLE EMISSIONS LIMITS

FOOTNOTES

1/ Gross vehicle weight

2/ LDV defined as passenger car or passenger car derivative capable of seating 12 passengers or less.

3/ Non-methane hydrocarbon standard of 0.25 gpm phased-in beginning in 1993: '93 - 40%; '94 - 80%; '95 - 100%

4/ CO cold start standard of 10 gpm @ 20°F phased-in between 1993-95: '93 - 40%; '94 - 80%; '95 - 100%

5/ Beginning in 1993, NO_x standard of 0.7 gpm phased-in: '93 - 40%; '94 - 80%; '95 - 100%.

6/ Low emission clean fuel vehicles will be required starting in model year 1995 and rising to 1 million LDV's and LDT's in 1997-2004.

7/ Diagnostics must provide greatest degree of detection of emissions in excess of standards as is feasible considering cost. Reevaluate every 4 years.

8/ Evaporative controls must achieve greatest degree of emission reduction achievable (reasonably expected to be available) considering cost, energy, and safety.

9/ Phased-in: 40% in '95, 80% in '96, 100% in '97.

10/ CO cold start standard at 20°F for light-duty vehicles and trucks phased in: MY '93-'99 for LDV, 10 gpm; for LDT, 13 gpm; MY 2000+ for LDV, 3.4 gpm; for LDT, 4.4 gpm.

11/ Applicable to LDV and LDT's. Additionally, EPA may promulgate regulations to require diagnostics on heavy-duty vehicles and engines and also may by regulation require inspection of on-board diagnostics in states with I&M programs in place.

12/ Evaporative controls must achieve greatest degree of emission reduction achievable by means expected to be available in any applicable model year.

13/ Standard phased-in: MY '94 - 40%; '95 - 80%; '96 - 100%.

14/ Intermediate in-use standard phased-in: MY '94,'95 - 100%; '96 - 60%; '97 - 20%.

15/ Final in-use standards phased-in: MY '96 - 40%; '97 - 80%; '98 - 100%.

16/ EPA must study whether the given pending emission levels for HC, CO, and NO_x and useful life (10 yr./100,000 mi.) for model years beginning after January 1, 2003 should be required on the basis of available technology, need for further emission reductions, and/or cost effectiveness. Report due June 1, 1997. EPA may also consider alternative standards. Pending standards to be promulgated depending on outcome of report.

17/ NO_x & PM standards for passenger vehicles phased-in: MY '94 - 40%; '95 - 100%. For LDT's: '95 - 40%; '96 - 100%.

LIGHT-DUTY TRUCK EMISSIONS LIMITS

	Waxman	Administration[1/]	H.R. 3030[1/]	Senate
Weight	0 - 10,000*	----	3,750 - 5,750 lbs.	3,750 - 5,750 lbs. 5,750+ lbs.
HC & NMHC	HC Cert. & In-Use: 0.5 gpm (3,750-10,000)* '93	HC Cert: 0.41 gpm (≤3,750 lbs)* phased[2/] 0.50 gpm (>3,750 lbs)* phased[2/] In-Use: '94-'95, <50K mi: same, >50K mi: 0.8 gpm '96, 50%; '97+, 100%; full life: 0.41 (<3,750 lbs) 0.50 (>3,750 lbs)	NMHC Cert: 0.32 gpm (5 yr./ 50,000 mi.), 0.40 gpm (10 yr./ 100,000 mi.), phased[4/] In-Use: 0.41 gpm, '94-97,[5/] 0.32 gpm, (5 yr./ 50,000 mi.), 0.40 gpm (7 yr./75,000 mi.), phased[6/]	HC Cert. & In-Use: 0.38 gpm, '95+ (3,750 - 5,750 lbs.) 0.46 gpm, '95+ (5,750 lbs.+) NMHC Cert. & In-Use: 0.32 gpm, '95+ (3,750 - 5,750 lbs.) 0.39 gpm, '95+ (5,750 lbs.+)
CO	Cert & In-Use: 4.0 gpm (3,750-5,750)* '93 5.6 gpm (5,750-10,000)* '93	Cert: 4.2 gpm (≤3,750 lbs)* phased[2/3/] 5.5 gpm (>3,750 lbs)* phased[2/3/] In-Use: '94-'95, <50Kmi: 5.20 gpm (<3,750 lbs) 6.70 gpm (>3,750 lbs) >50K mi: 10.0 gpm '96, 50%; 97+, 100%; full life: 4.2 gpm (<3,750 lbs) 5.5 gpm (>3,750 lbs)	Cert: 4.4 gpm (5 yr./ 50,000 mi.); 5.5 gpm (10 yr./ 100,000 mi.), phased[4/] In-Use: 6.7 gpm, '94-97, phased[5/] 4.4 gpm, (5 yr./ 50,000 mi.), 5.5 gpm (7 yr./ 75,000 mi.), phased[6/]	Cert. & In-Use: 4.4 gpm, '95+ (3,750-5,750 lbs.) 5.0 gpm, '95+ (5,750 lbs.+)
NO_x	Cert. & In-Use: 0.5 gpm (3,650-5,750)* '93 1.0 gpm (5,750-10,000)* '93		Cert. & In-use: 1.0 gpm[7/]	Cert. & In-Use: 0.7 gpm, '95+ (3,750 - 5,750 lbs.) 1.1 gpm, '95+ (5,750 lbs.+)
Particulates	----		Cert. & In-use: 0.08 gpm[7/]	0.12 gpm, '95+ (5,750 lbs.+)

* Gross vehicle weight.

LIGHT-DUTY TRUCK EMISSIONS LIMITS

FOOTNOTES

1/ Low emission clean fuel vehicles are also required starting in model year 1995 and rising to one million LDV's and LDT's annually 1997-2004.

2/ 50% compliance in 1994 and 100% in model year 1995.

3/ Cold start requirements phased in 1993-1995.

4/ Phased-in: MY '94 - 40%; '95 - 80%; '96 - 100%

5/ Intermediate in-use standard phased-in: MY '94,95 - 100%; '96 - 60%; '97 - 20%.

6/ Final in-use standards phased-in: MY '96 - 40%; '97 - 80%; '98 - 100%.

7/ NO_x and PM standard phased-in: MY '95 - 40%; '96 - 100%

HEAVY-DUTY VEHICLE EMISSIONS LIMITS

	Waxman	Administration[1/]	H.R. 3030	Senate
HC	(>10,000 lbs)	----	----	----
CO	----	----	----	----
NO_x	4.0 gbh '94-'96 1.7 gbh '97+	----	----	4.0 gbh, '96+
PM	0.25 gbh '91-'93 0.10 gbh '94+	.25 gbh (diesel urban buses '91-'93) .1 gbh (urban buses)[2/]	.25 gbh (diesel urban buses '91-'93) .1 gbh (urban buses)[2/]	0.25 gbh, '91-'93 0.10 gbh, '94+ 0.10 gbh, '91+ (buses)

1/ Standards are to reflect the "greatest degree of emission reduction achievable" for HC, CO, NO_x, and particulates beginning MY'83. EPA may promulgate regulations revising standards to achieve additional emission reductions.

2/ No later than 12 months after enactment of the section, EPA is to promulgate regulations requiring areas having a 1980 population greater than 1,000,000 to phase-in (from 1991-94) new buses that run exclusively on clean fuel: MY '91 - 10%; '92 - 25%; '93 - 60%; '94 - 100%. Emissions of particulates are not to exceed 0.1 gbh for the clean fuel buses.

DEFINITION OF "ENHANCED" I&M

	Waxman	Administration	H.R. 3030	Senate
Vehicles Covered	All light-duty vehicles regularly operated	Light-duty vehicles and trucks, at a minimum	Light-duty vehicles and trucks, at a minimum	All registered light-duty vehicles
Area	Nonattainment MSA with '85 population over 100,000 (serious, severe, or extreme areas) and ozone transport region counties	Urbanized areas with 1980 population >200,000 in serious or severe nonattainment areas.	Urbanized areas with 1980 population >200,000 in serious or severe nonattainment areas.	MSA with '80 population of 100,000 or more in moderate, serious, severe and extreme areas (moderate areas that do not already have basic I/M may choose Stage II instead) and ozone transport regions.
Frequency	Annual	----	----	----
Scope	• Direct inspection and repair of components • Centralized or computerized testing • No pollutants specified	• EPA to issue guidance, including performance standards for light-duty vehicles and trucks. • State program to include computerized emission analyzers. • Enforcement through denial of vehicle registration.	• EPA to issue guidance, including performance standards for light-duty vehicles and trucks. • State program to include computerized emission analyzers. • Enforcement through denial of vehicle registration.	• Direct inspection and repair of components • Computerized emission analyzers • Denial of vehicle registration except for programs already in place that can demonstrate a more effective enforcement mechanism. • Any future on-board emission diagnostic systems requirements.
Waiver	At least $200 for warranty items; lower limit allowed for non-warranty items	• No waiver for parts or vehicle covered by emission control warranty. • Required expenditure for non-warranty waivers of at least $75 for pre-MY'81; initially $200 for MY'81 and $75 at the next inspection.	• No waiver for parts or vehicle covered by emission control warranty. • Required expenditure for non-warranty waivers of at least $500.	• Repair requirements may be waived when costs exceed $200.

FUEL LIMITATIONS

	Waxman	Administration[2/]	H.R. 3030[2/]	Senate
Lead in gasoline	No lead 1/1/90	-----	----	Ban in 1/1/91; 2 year extension if needed for farm vehicles. Production of engines using leaded fuel prohibited after MY'92.
Gasoline volatility	• Class C, 9 psi RVP, '90; Proportional other areas	9 RVP (high ozone season).[5/] Regulations promulgated 6 months after enactment, to apply no later than '92. Gasohol waiver is EPA's option.	9 RVP (high ozone season).[5/] Regulations promulgated 6 months after enactment, to apply no later than '92. 1 psi gasohol waiver.	9 RVP in Class C areas, May 16-Sept. 15 or longer if EPA determines. Regulations to be promulgated. Effective second high ozone period after enactment. Proportional reduction in areas other than Class C. 1 psi gasohol waiver
Diesel Sulfur	---- (small refinery by 7/1/93)[1/]	Effective 10/1/93,[3/] 0.05% wt. limit (and minimum cetane index of 40)	Effective 10/1/93,[3/] 0.05% wt. limit (and minimum cetane index of 40)	Effective 10/1/93, 0.05% (by weight) or minimum cetane index of 40.[6/]
"Clean Fuels"	----	By 10/1/93, State plans must require oxygenates as necessary, in combination with other measures, to attain CO standard[4/] EPA to define "clean fuel" criteria and require manufacture and sale of clean fuel vehicles starting in 1995. States to insure clean fuel economical to user.	Effective 10/1/93, state plan must require oxygenates (min. 2% mod. areas; 2.7% serious) in high CO portion of year, as necessary to attain CO standard.[4/] EPA must promulgate annual emission reductions based on 85% methanol.[9/] Manufacturers required to certify capacity to produce, distribute, and offer to sell clean fuel vehicles.[10/]	Effective 10/1/91, in CO nonattainment areas from Oct. 1-Mar. 31, fuel must have oxygen content of 3.1% or greater.[7/] EPA to promulgate emission standards within 18 months of enactment for low polluting vehicles. Standards to reflect best available technology. Effective second model year after promulgation.[8/] EPA to promulgate regulations requiring use of low polluting fuels in urban buses, phased-in '91-'94[11/]

FUEL LIMITATIONS

FOOTNOTES

1/ Small refinery defined as one with capacity of <175,000 bbd.

2/ EPA is to promulgate regulations 12 months after enactment setting forth alternative market-based control measures for any mobile source provisions.

3/ Heavy-duty diesel vehicles must use 0.10% wt sulfur diesel, in '91-'93 MY to be certified.

4/ State may opt out of requirements if it can be demonstrated that oxygenates are not needed to attain CO standard (applies to moderate and serious areas).

5/ More stringent RVP as necessary to generally achieve comparable evaporative emissions nationwide.

6/ EPA to promulgate regulations no later than 1 year after enactment. Manufacturers and importers of diesel fuel that is not for use in motor vehicles must dye the fuel. For certification of heavy-duty vehicles, sulfur content is 0.05%, MY'93-'94; 0.05% and cetane index of 40, MY'94+.

7/ EPA to promulgate guidelines within 9 months after enactment on marketable oxygen credits that may be exchanged between sellers in the same nonattainment area. Average oxygen content of fuels sold in CO nonattainment areas must be 3.1% or greater. EPA may waive oxygenate fuel requirement if it may interfere with attainment.

8/ Low polluting fuels means methanol, ethanol, propane, natural gas or any other comparably low polluting fuel.

9/ Other alternative fuels such as ethanol, natural gas, LPG, 100% methanol, reformulated gas, other fuels, electricity, or power source may be used to achieve reductions.

10/ Subject to availability of fuel: 500,000 clean-fuel vehicles - '95; 750,000 - '96; 1,000,000 per year - '97-2004. Applicable to ozone nonattainment areas (1988 ozone design value 0.18 ppm+) with 1980 population of 250,000 or more, unless EPA has approved a program to replace clean fuel program.

11/ Applicable to buses operated mostly in MSA's with 1980 population of 1,000,000 or more. Phased-in: 10% of new urban buses (purchased or placed into service) in MY'91; 25% in '92; 60% in '93; and 100% in '94+.

MOTOR VEHICLE ENFORCEMENT PROVISIONS

	Waxman	Administration	H.R. 3030	Senate
FTP Test Revisions	Add idle test	Add test to simulate I&M test. Add cold start test.	Add test to simulate I&M test. Add cold start test.	Idle test. Review and revise to insure test reflects actual driving conditions. Testing of evaporative and tailpipe emissions. Add cold start test.
Averaging to meet standards	Prohibited	EPA authorized to permit by regulation.	Prohibited	Prohibited
LDV "Useful Life"	10 years or 100,000 miles, MY 95+	----	----	5 years or 50,000 miles, MY'94 or before 10 years or 100,000 miles, MY'95+
Assembly line test criterion	90% compliance	----	----	90% compliance (MY '91)
Recall criteria	"Properly" maintained changed to "normally"	----	EPA may order manufacturer to audit effectiveness of recall repairs and conduct recall testing. Recall emission levels for LDV HC and LDT CO and HC specified.	EPA may require manufacturer to pay costs of procuring and testing. EPA required to consider State I/M data in making recall determinations.
Tampering prohibition	Expanded to everyone	Expanded to everyone	Expanded to everyone	Expanded to everyone
Defeat device sales	Prohibited	Prohibited	Prohibited	Prohibited
Tampering civil penalty to individuals	$2500/vehicle	$2500/part	$2500/part	$2500/vehicle or $2500/part for defeat device sales or manufacture.

TITLE III

TITLE IV

Hoffman Disk A-1:SIDEP.2 D R A F T #2 1/11/90

SIDE-BY-SIDE COMPARISON FOR PERMITS

Admin/House Bill	Senate Bill	Waxman
EPA writes regulations for operating permit program within 1 year of enactment	Same	EPA publishes guidelines for permit programs within 6 months of enactment.
State submits operating permit program to EPA for approval within 3 years of enactment.	Same, plus State submits SIP revision within 18 months of enactment, requiring operating permits for major sources of VOCs and NOx. Permits issued under operating permit may be called Program Permits, and permit issued under SIP revision may be called SIP Revision Permits	State submits compliance strategy for ozone areas within 9 months after enactment, and, for serious, severe, and extreme ozone areas, a SIP revision within 4 years after enactment, requiring sources of VOC and NOx to obtain operating permits. Permits must specify emission limits and provide for compliance reporting. Size cut-offs vary, depending on classification of nonattainment area. Similar provisions for CO and PM-10 (except no compliance strategy requirement

EPA acts on State program within 1 year of submittal	Same, plus EPA acts on SIP revision within 1 year of submittal	Compliance strategy for moderate area deemed approved upon submittal, unless EPA later disapproves. Compliance strategy for other ozone areas must be approved or disapproved by EPA within 6 months of submittal. EPA must act on SIP revision within 1 year of submission.
Operating permit program requires permits for major sources of VOC, NOx, CO, PM-10, SO-2, and lead; NSPS sources; air toxics sources; PSD/NSR sources; and acid deposition sources. Major sources defined as 100+ TPY.	Same, plus SIP revision requires operating permits for major sources of VOCs and NOx. Major sources defined as less than 100 TPY in certain ozone nonattainment areas	Compliance and SIP revision require operating permits for sources, with size cut-offs that depend on the classification of the area.
Sources must submit permit application within 1 year of EPA approval of State permit program (or, if later, EPA promulgation of regulations requiring controls). State then begins to issue permits.	Same, plus State must issue SIP Revision permits within 3 years of enactment	--
State must notify EPA and contiguous States of proposed permits	Same for Program Permits; for SIP Revision Permits, no notice to contiguous States required	--

EPA has 90 days to review and, if necessary, veto the permit.	Same for Program Permits; 60-day period for SIP Revision permits	--
If EPA vetoes, State must revise the permit and resubmit it to EPA; if EPA again vetoes, EPA must issue (or deny) the permit	Same for Program Permits; no comparable provision for SIP Revision permits	--
Permits have maximum 5-year term	Same for Program Permits and SIP Revision Permits	--
Monitoring and reporting requirements	Same for Program Permits and SIP Revision Permits	Monitoring and reporting requirements.
Detailed permit fee provisions	Same for Program Permits; skeletal permit fee provisions for SIP Revision Permits; plus emission fees to State and EPA for major sources of VOC, NOx, CO, PM-10, and PM-10 precursors	Permit fee provisions.
Anti-backsliding	Same for Program Permits; no comparable proviion for SIP Revision Permits	--
Shield against penalties for failure to have a permit for sources that submit complete permit applications	Same for Program Permits; no comparable provision for SIP Revision Permits	--

Shield against other CAA requirements, as determined on permit-by-permit basis, for sources that receive a permit	Same for Program Permits; no comparable provision for SIP Revision Permits	--
Partial and interim permit programs may be approved	Same for Program Permits; no comparable provision for SIP Revision Permits	--
Authority for general permits and permits for temporary sources	Same for Program Permits; no comparable provision for SIP Revision Permits	--

TITLE V

COMPARISON OF ACID RAIN PROPOSALS

	Administration	H.R.3030	S.1630
Scope/Geographic Coverage	48 states + DC	same	same
Legislative Goal- SO2 reductions from 1980 levels	5 mm t/y by 12/31/1995 10 mm t/y by 12/31/2000	same as Administration same as Administration	5 mm t/y by 1/1/1995 10 mm t/y by 1/1/2000
Sources Covered			
- Phase 1	"allowances" for 107 specific steam-electric plants with units =>100 mWe,=>2.5 lb.SO2/mmBtu, optional substitutions.	same 107 plants	same 107 plants
- Phase 2	"allowances" for steam-electric =>75mWe, =>1.2 lb.SO2/mmBtu	same as Administration	same + coal & oil units <1.2 lb./mmBtu and units built between 1985 and enactment.
	Steam-electric sources <1.2 lb.SO2/ mmBtu and sources <75 mWe held at their 1985 emission rates.	same as Administration	Sources < 75mWe and gas units held to 1985 emission rates.
Allocation Method-SO2			
- Phase 1	Allowances based on 2.5 lb.SO2/mmBtu x fuel consumption (average of 1985-87). (List of sources specified)	same as Administration	same as Administration
	Subtitutions, additional sources based on actual emissions in 1985.	same as Administration	same as Administration
Allocation Method-SO2			
- Phase 2	Allowances based on 1.2lb.SO2/mmBtu x fuel consumption (average of 1985-87); Subtitutions, Additional sources, Small units and units <1.2lb.SO2/mmBtu limited to actual 1985 emission rates, but may elect into system to obtain allowances	same as Administration	similar, except units <1.2lb.SO2/mm Btu are part of allowance system with extra (+20%) allowances. Gas and units <75 mWe limited to '85 rates.

	Administration	H.R.3030	S.1630
Maintenance of SO2 reduction (CAP)	fixed national allowance level for affected and new sources	same as Administration	same as Administration
	sources <1.2# lose allowances upon retirement. Utility cap is about 5.1 mmtons SO2/year	same as Administration	affected sources can transfer allowances upon retirement. Utility cap is about 8.9 mmtons SO2/year
Legislative Goal- NOx reductions	2 mm t/y below projected levels in 2000. By 12/31/2000, coal units =>75mWe to meet NOx emission rates equivalent to Low-NOx burners; units may elect for allowances based on "equivalent" NOx rate and 1985-87 heat input.	same as Administration	2mmt/y below 1980 levels. By 1/1/2000, coal "affected" units to meet NOx rate based on 1985-87 heat input and rate 0.45 lb. NOx for tangential units, 0.5 lb.NOx for dry, wall-fired; all others based on CEM data in 1995-96, Administrative discretion.
Sources Covered	tangential and dry-bottom, wall-fired coal/steam-electric units =>75 mWe	same as Administration	Coal-fired "affected" units.
Maintenance of NOx reduction	none, except a fixed allowance level for sources electing to be affected	same as Administration	none, except NSPS for NOx by 1/1/1994
Primary Implementation Responsibility	Federal, optional for States	same as Administration	same as Administration
Implementation Method	Federal system of tradable emission allowances, source compliance plans	same as Administration	same as Administration
Emission Trading/Offsets			
- Phase 1	intrastate except for interstate utilities	same as Administration	same as Administration
- Phase 2	within two geographic regions	within trading regions	within two major geographic regions
- New source offsets	national	same as Administration	same as Administration

	Administration	H.R.3030	S.1630
Interpollutant Trading	1.5 NOx to 1.0 SO2	same as Administration	same as Administration
Hoarding Issue	no provision, market forces	same as Administration	2% tap on allowances for EPA, as seller-of-last-resort.
Continuous Emission Monitoring (CEM) or equivalent Requirement	all sources subject to Title	same as Administration	same as Administration
Default Provision	no specific provision, but cannot operate without permit; also see "Penalties"	same as Administration	same as Administration
Penalties	$2000/excess ton, plus offset following year(s).	same as Administration	same as Administration
Clean Coal Technology (CCT) Incentives	3-yr extension of Phase 2 compliance date for repowering, FERC CCT Rulemaking within 2 yr on Rate Incentives, amortization; no NSPS, accelerated New Source Review	same as Administration	4-yr extension of Phase 2 compliance date for repowering, Units with 1985 rate <1.2# and CCT before1/1/1991 may use any 3 consecutive years (1980-89) for baseline.
New NSPS	none, current statute requires periodic review	same as Administration	for NOx by 1/1/1994
Misc.	stack height requirements waived	stack height waiver provision deleted	Repeal of Percent Reduction; Federal facilities to install cost-effective conservation measures, utilize renewable energy technologies for 10% of needs; Federally leased facilities to install all cost-effective energy conservation improvements; National Acid Lakes Registry.
Estimated Cost and Electric Rate Impacts	$3.4-4.1 billion/year nationally; <3% nationally; impacts >10% rare	similar	similar
Cost Sharing	no explicit	no explicit	no explicit
Report to Congress	Assessment of environmental effects of Title by 1/1/2003	same as Administration	Report on feasibility and effectiveness of Acid Deposition Standards; Inventory of Industrial SO2 emissions and trends; emission growth to trigger further controls.

TITLE VI

SIDE-BY-SIDE COMPARISON OF THE ADMINISTRATION
AND SENATE BILL
PROVISIONS RELATING TO ENFORCEMENT

	ADMINISTRATION BILL	SENATE BILL
Amend existing Clean Air Act (CAA) Section 113 to accomplish several important goals:	Sec. 601. Section 113 Enforcement.	Sec. 601. Section 113 Enforcement.
Clarification of 30-day Notice	Amends Section 113 to clarify and confirm that the 30-day notice period is not a shield to protect sources.	Same.
	Subsection 113(a)(1) is amended to clarify and confirm that the 30-day notice provision is intended solely to allow the states an opportunity to exercise their civil enforcement prerogatives before Federal enforcement action is initiated.	Same.
	Subsection 113(b)(2) is likewise amended to clarify and confirm that a source is liable for penalties for all violations of a SIP, even including violations which pre-date the Notice of Violation.	Same.

	ADMINISTRATION BILL	SENATE BILL
	Amendments to Subsection 113(a) clarify and confirm that the 30-day notice provision for civil and administrative SIP actions is inapplicable to criminal actions.	Same.
	The amendment also clarifies and confirms that, as with all other environmental statutes, the option of proceeding criminally is not excluded by the bringing of an administrative or civil action.	Same.
Enforceability of SIP requirements when a revision is pending at EPA	Not addressed directly. 12 months specified for acting on proposed revisions.	Title I of the Senate bill amends existing Section 110 adding a new Subsection 110(k) which redefines the term "applicable implementation plan" (see current Subsection 110(d)), and specifically provides for enforceability of SIP pending a revision.
Expanded Administrative Compliance Order Authority	Subsection 113(a)(4) is amended to authorize EPA to issue administrative orders with non-renewable compliance schedules lasting up to 12 months. Would enable EPA to expeditiously	resolve violations administratively, while still protecting against extensions of applicable compliance deadlines. EPA would retain authority to pursue civil penalty

	ADMINISTRATION BILL	SENATE BILL
	actions, contractor listing and other appropriate remedies until compliance is achieved, and the issuance of an order would not insulate a source from criminal prosecution.	Same.
Ensuring Full Enforceability of Stationary Source Statutory Requirements	Section 113 is amended to ensure that administrative, civil judicial, and criminal sanctions may be imposed for violations of any requirement of titles I, III, IV or V of the Act, including any rule, order, waiver, permit, plan or fee requirement promulgated or approved under the Act. This amendment ensures enforceability of new requirements proposed elsewhere in the bill and of existing requirements not currently enforceable such as Section 167 new source review orders.	Fails to reference all enforceable requirements either by specific section references or, as in the Administration Bill, by general title references, and does not include "permit" requirements amendment. Thus administrative orders under 113(a) would only be available for Title I violations. Subsection 113(d) administrative penalty actions, and civil or criminal judicial enforcement would only be available for Titles I and III violations. Title IV (permits) and Title V (acid rain) would not be enforceable.

	ADMINISTRATION BILL	SENATE BILL
Ensuring Enforceability of, design, equipment, work practice and operational standards without proving the emission of an air pollutant	Not addressed. NOTE: THIS PROBLEM WAS SUPPOSED TO HAVE BEEN CURED. THE OLD OFFENDING LANGUAGE WAS REINSERTED WITHOUT OECM KNOWLEDGE. SEE JUNE 2D DRAFT.	New Section 112(h) amends existing Section 112(e) and provides that any such standard "shall be treated as an emissions standard" under the Act, and thus presumably for enforcement. However, new Section 112(i) which contains the compliance language still provides, in language virtually identical to current Section 112(c), that "no air pollutant may be emitted" in violation of a standard.
Enhanced Criminal Sanctions Authority	Subsection 113(c), which currently authorizes only misdemeanor-level criminal sanctions for violations of the Act, is amended to authorize felony-level sanctions for most knowing violations, and new authorities to address criminal endangerment, and knowing recordkeeping and fee violations. The paragraphs in Subsection 113(c) are reordered and recodified as in the Clean Water Act.	Same, except no criminal enforcement authorized for knowing violations of Title IV, and V requirements.

	ADMINISTRATION BILL	SENATE BILL
Knowing violations of the Act Generally	Current Subsection 113(c)(1), new 113(c)(3): imprisonment increased from 1 to 5 years. Penalties increased from $25,000 (to $250,000 for individuals or $500,000 for persons other than individuals) by cross-referencing to the schedule of fines in Title 18 of the U.S.C. § 3623. Maximum imprisonment and fines doubled for second offenders.	Same, except enforcement limited to titles I and III violations.
Misdemeanor sanctions for violations of fee requirements and negligent endangerment	New paragraphs 113(c)(1) and (c)(2) authorize misdemeanor-level criminal sanctions against anyone who knowingly fails to pay a fee owed the government or who negligently violates amended Section 112 and thereby places another person in imminent danger of death or serious bodily injury.	Same, except fee violations limited to Title I and III requirements.

	ADMINISTRATION BILL	SENATE BILL
Knowing endangerment	New paragraph 113(c)(5) authorizes felony-level sanctions against anyone who knowingly releases hazardous substances and toxic chemicals regulated under Section 112 or under 42 U.S.C. §11002(a)(2), and who knows at the time that another person is thereby placed in imminent danger of death or serious bodily injury.	Same.
	Maximum sanctions: imprisonment 15 years, and penalties in accordance with Title 18 U.S.C. schedule or, for anyone who is not an individual, $1,000,000. Doubled for second offenders.	Same, except criminal fines for violators who are not persons only $1,000 (probably due to a typographical error).
	Adopts CERCLA proof, except without affirmative defense language which is more appropriate for tort law.	Same.
Criminal violations of notice, recordkeeping and reporting requirements	Existing CAA paragraph 113(c)(2) (new paragraph 113(c)(4)), which establishes criminal liability for knowing false statements and falsification or tampering	Same.

	ADMINISTRATION BILL	SENATE BILL
	with monitoring devices, is amended to include liability for: knowing failures to act; knowing omissions of material information; the knowing destruction, alteration, concealment, or failure to maintain documents necessary for CAA compliance; and knowing failures to install necessary monitoring devices.	
	The amendments also increase the maximum term of imprisonment for this category of violation from 6 months to 2 years, and the maximum $10,000 penalty to an appropriate amount as established by cross-referencing Title 18 U.S.C., which provides for maximum fines of $250,000 for individuals and $500,000 for organizations for felony convictions. Maximum sanctions are doubled for second offenders.	Same.
Administrative Penalty Authority	Would amend the Act to authorize EPA administrative penalty orders, at new Subsection 113(d).	Same, except only available for violations of Titles I and III.

	ADMINISTRATION BILL	SENATE BILL
	This amendment sets a presumptive cap of $200,000 on administrative penalties sought, but provides that EPA and the Department of Justice may agree to increase the penalty limit for certain cases or categories of cases by entering into memoranda of understanding. These agreements would be especially appropriate for categories of cases which routinely involve multiple violations, each of which may warrant minor penalties but where it would be appropriate to seek a total of more than $200,000.	Same, except cap is not amendable.
Field citations	Would also amend the Act to authorize EPA to implement a "field citation" program for minor violations, e.g. routine reporting and record-keeping violations. The categories of cases and penalty schedules (not to exceed $5,000 per day for each violation) would be specified in regulations promulgated after consultation with the Attorney General.	Same.

ADMINISTRATION BILL	SENATE BILL
The regulations would specify hearing procedures. The payment of a field citation would not be a defense to further enforcement or penalty liability if the violation continues.	Same.
Assessment of civil penalties under either of these new administrative penalty authorities are subject to judicial review in the appropriate United States District Court.	Same.
Assessments of administrative penalties are enforceable by suit brought by the Attorney General in the appropriate U.S. District Court.	Same.
The provisions for judicial review and collection of penalties are intended to operate like the comparable provisions for administrative penalties in the Clean Water Act, 33 U.S.C. § 1319(g) (8) and (9).	

	ADMINISTRATION BILL	SENATE BILL
	NOTE: Current Subsection 113(d), which allows states and EPA to grant "delayed compliance orders" of SIP requirements past the attainment deadlines, is by virtue of this amendment, prospectively repealed. Any delayed compliance orders in effect prior to the repeal of Subsection 113(d) would, however, remain in effect until expiration or termination as provided therein, and shall not be affected by this amendment.	Same.
Penalty Assessment Criteria	A new Subsection 113(e) clarifies the criteria to be applied in assessing penalties (currently in Subsection 113(b)), and clarifies and confirms that the maximum statutory penalty may be assessed for each day of each violation, including each day of a multi-day averaging period. Subsection 113(e) also clarifies and confirms that once EPA establishes evidence of a violation using a formal test method, EPA can use other credible evidence to prove additional	Same.

ADMINISTRATION BILL	SENATE BILL
violations, or that a violation has continued.	
In addition, Subsection 113(e) clarifies and confirms that once EPA has made a prima facie case that establishes a period of violation, the burden of proving any intervening days of compliance rests with the source. Sources may then rebut this presumption by proving by a preponderance of the evidence that there were intervening days with no violation or that the violation was not continuous in nature.	Same.
Finally, new Subsection 113(e) explicitly identifies the factors both a court and the Administrator shall consider in determining the amount of any civil penalty assessed under Section 113 or Subsection 304(a)(1) or (3).	Same.
Current Subsection 113(e), which extended compliance deadlines for certain steel plants up until the end of	Same.

	ADMINISTRATION BILL	SENATE BILL
	1985, is prospectively repealed. That authority is no longer necessary or appropriate in light of the expiration of the deadlines and the very limited number of extensions that were sought by the steel industry.Same.	
Rewards	New Subsection 113(f) authorizes the Administrator to offer rewards of up to $10,000 to individuals who provide information concerning violations of the Act which lead to criminal convictions or civil or administrative judgments of liability.	No provision.
	Funding for rewards would come from general appropriations or from appropriations from the separate fund provided for in Section 304 as amended.	Same.

	ADMINISTRATION BILL	SENATE BILL
Reviewability of Administrative Orders	Sec. 602. This section amends Subsection 307(b)(2) of the CAA to clarify and confirm that orders or notices issued by the Administrator under Sections 113(a), 167 and 303, administrative subpoenas under Subsection 307(a), and actions under Sections 114, 206(c) and 208 of the Act are not final agency action for purposes of judicial review.	Same.
	This section further provides that such orders, notices, subpoenas and actions are not judicially reviewable until an enforcement proceeding is brought under Sections 113, 120, 204, 205 or 304 of the Act.	Same.
	This amendment does not alter the provision of Subsection 307(b)(2) that precludes challenges in enforcement proceedings to actions that could have been directly reviewed under Subsection 307(b)(1).	Same.

	ADMINISTRATION BILL	SENATE BILL
	The ability of a violator to contest the validity of an administrative order, notice, subpoena, or investigatory action is preserved as defendants will have the opportunity to challenge the same in the district court enforcement action.	Same.
Compliance Certification	Sec. 603. This amendment clarifies and confirms that EPA has the authority under Subsection 114(a) to require enhanced monitoring and submission of compliance certifications, and to require such monitoring and compliance certifications by major stationary sources.	Essentially the same.
Contractor Inspections	Sec. 604. This section amends CAA Section 114 to clarify and confirm that, as in other environmental statues, EPA has discretionary authority to use contractors to conduct CAA inspections. The section includes a reference to 18 U.S.C. § 1905 providing that contractors are subject to that provision's criminal	Essentially the same.

	ADMINISTRATION BILL	SENATE BILL
	sanctions for illegal disclosures.	
Administrative Enforcement Subpoenas	Sec. 605. This section amends CAA Subsection 307(a) to give EPA express authority to issue administrative subpoenas in support of its enforcement activities under the Act. This expands existing authority which is limited to subpoenas in support of rulemaking activities. This authority complements the additional administrative enforcement mechanisms proposed in these amendments, and conforms the CAA to other environmental statutes.Essentially the same.	
Enforcement of Administrative Orders Emergency Orders	Sec. 606. Current Subsection 303(b) provides for civil penalties of $5,000 for each day of "willful" violation of an emergency order issued by the Administrator under Subsection 303(a), and no criminal penalties.	Not identical provision but essentially the same amendment included in next section.

	ADMINISTRATION BILL	SENATE BILL
	This amendment deletes Subsection 303(b) and makes Section 303 orders enforceable under the Act's other enforcement authorities, e.g. Sections 113, 120, 304(a)(1), and 306. The maximum civil penalty for an emergency order violation is thereby raised to $25,000 per day of violation and the requirement of proving "willfulness" for civil actions is eliminated. In addition, criminal sanctions for emergency order violations are made available under Subsection 113(c) for knowing violations of emergency orders and for knowing endangerment.	
Scope of Emergency Powers	Sec. 607. Section 303 is also amended to authorize injunctive actions and emergency orders for episodes threatening to the public welfare and the environment, in addition to its current authority to safeguard human health.	Sec. 606. Essentially the same. Merely merges Sec. 606 and 607 of the Administration bill into one section.

	ADMINISTRATION BILL	SENATE BILL
	In addition, both the 24- or 48-hour time limitations on the duration of emergency orders, and the prohibition against judicial enforcement of emergency orders unless state and local authorities have not acted, are eliminated. This will allow the Agency to effectively order necessary emergency action and to enforce any order issued without delay, and conforms the CAA to other environmental laws. This amendment preserves the existing Section 303 requirement that the Administrator consult with state and local authorities before taking any action.	
Contractor Listings	Sec. 608.	Sec. 607.
Facilities listed	Section 306 of the Act is amended to enable the Administrator to exclude from Federal government contracts, grants, or loans any facility owned or operated by a person criminally convicted under Subsection 113(c). This	Same.

	ADMINISTRATION BILL	SENATE BILL
	expands current authority, which limits the contractor listing action to the particular violating facility. The Administrator is given discretion to limit the scope of the exclusion to the particular violating facility or to a subdivision of the legal entity which owns or operates the facility, as appropriate.	
Types of criminal violations giving rise to listing	The mandatory listing requirement in Subsection 306(a) is expanded to include any violation criminally actionable under Subsection 113(c) of the Act, as well as mobile source violations under Sections 205(d), 211(d)(3) and 212(e). This section also ensures that the new criminal sanctions for knowing endangerment, negligent endangerment, and knowing omissions and failures to act result in mandatory listing under Section 306.	Same, except title II section references are omitted.
Correcting Listing Violations	The amendment also clarifies and confirms that, following a conviction under	paragraph 113(c)(2) (i.e.,Same.

	ADMINISTRATION BILL	SENATE BILL
	false statements, omissions, etc.), not only must the false statement be corrected, but additionally any substantive violation underlying the false statement (e.g., a source in violation of the NSPS for which the defendant falsely submitted complying monitoring information) must be certified by the Administrator as being in actual substantive compliance in order for the defendant to be removed from the list.	
Judicial Review Pending Reconsideration of Regulation	Sec. 609. This amendment clarifies and confirms that under Subsection 307(b), as under Subsection 307(d)(7)(B), a petition for agency reconsideration does not render agency action non-final for purposes of judicial review and does not toll the 60-day time period for seeking judicial review.	Sec. 608. Same.
Citizen Suits	Sec. 610.	Sec. 609.

ADMINISTRATION BILL	SENATE BILL
Would amend Section 304 to authorize the assessment of civil penalties in citizen suit actions as in the Clean Water Act and the Resource Conservation and Recovery Act.	Same.
Citizen suit penalties would be deposited into a special fund in the U.S. Treasury. The monies would be available for appropriation to EPA for use in air compliance and enforcement activities.	Same.
Would require that copies of citizen complaints and proposed settlements in citizen suit cases be served on the Administrator and the Attorney General, as in the Clean Water Act.	Same.
No citizen suit settlement could be entered unless the government is given 45 days notice and an opportunity to comment or intervene in the action.	Same.

	ADMINISTRATION BILL	SENATE BILL
	This amendment allows the government to substitute itself as plaintiff with respect to a citizen claim for civil penalties, and clarifies.	No.
	Would confirm that the federal government is not bound by a citizen enforcement action to which it is not a party.	Same.
	No.	Would amendment to Subsection 304(a)(2) for suits against the government based on unreasonable delay; an amendment to Subsection 307(b) -- Deferred Actions; and amendment to Section 307 -- Petitions
Enhanced Implementation and Enforcement of New Source Review Requirements	Sec. 611. Would clarify and confirm that "operation", as well as construction and modification, of major sources not meeting new source review requirements is prohibited. See also Sec. 601 of the bill which ensures that Section 167 administrative orders regarding new sources can be directly enforced,	Sec. 610. Same.

	ADMINISTRATION BILL	SENATE BILL
	both civilly and criminally, under Section 113.	
Movable Stationary Sources	Sec. 612. The definition in Section 302 of the Act of the term "stationary source" is amended to clarify and confirm that emissions from movable stationary sources (such as mobile asphalt batch mixing trailers and ships at port) are subject to the Act's stationary source requirements.	Sec. 611. Same.
Enforcement of New Titles of the Act	Sec. 613. This provision would expand the availability of Section 120, which requires recovery of the economic benefit of noncompliance, to cover violations of new proposed Title IV (governing permit programs) and Title V (regarding acid rain).	No similar provision.

R. Hopp. OECM-Air/December 27, 1989

ONE PAGERS

ANALYSIS OF ADMINISTRATION BILL VS. S1630
(ONE-PAGERS)

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Title I

Issue: Definitions and Requirements. This provision defines major source thresholds and applicability requirements.

Senate Bill	Administration Position
- VOC thresholds (emissions or potential emissions) - 100 tpy-- moderate area - 25 tpy-- serious, severe - 10 tpy-- extreme area	- VOC threshold: (emissions or potential emissions): - 100 tpy
- CO thresholds (emissions or potential emissions): - 50 tpy-- moderate - 25 tpy-- serious	- CO threshold: (emissions or potential emissions): - 100 tpy
- PM-10 threshold (emissions or potential emissions): - 50 tpy for PM and "precursor" gases (e.g., SOx)	- PM-10 threshold (emissions or potential emissions): -100 tpy for PM-10
- Major VOC sources in all but moderate areas subject to $5000/ton fee for emissions in excess of 50% of actuals in attainment year if area does not attain (2000 and beyond)	- Major VOC sources in severe areas which fail to attain (in 2010) are subject to $5000/ton annual fee for emissions in excess of 80% of lower of actual or allowable emissions in 2010.

Why the Administration's Position is Better

• Both bills have important requirements for new major sources or modifications of existing major sources which address not only required emission reductions but also fees for construction and operating permits.

• Senate bill applies these requirements to a greater number of sources by lowering the thresholds (i.e., the tons per year emission cutpoints) for applicability based on the classification of the areas. These requirements (primarily, offsets and fees) will subject additional sources (in some areas) to closer scrutiny regarding emissions growth, but these smaller sources may be less able to identify and obtain emission offsets.

Title I

Issue: Offsets and Netting. This provision establishes the offset and netting criteria, by pollutant, for major new or modified sources in nonattainment areas.

Senate Bill	Administration Position
	-- Same
- For new or modified major sources, requires greater than 1 to 1 offsets of same pollutant in same area; State to set amount based on reasonable further progress requirements. (Same as current Act)	
	- Same
- Reductions required by law elsewhere cannot be counted as reductions for offsets. (Same as current Act)	
	- No specified ratio
- 1.5 to 1 VOC offset ratio in serious areas; 2 to 1 in severe and extreme areas	
	- No specified ratio
- 1.5 to 1 CO offset ratio in serious area	

Why the Administration's Position is Better

• Both bills make an effort to ensure that emissions growth from new or expanding major sources will not interfere with efforts to reduce current emission levels. By specifying offset ratios at a ratio of greater than 1 to 1, both assume that States can use new source "growth" as a control measure to actually reduce future emissions. However, the ratios specified in the Senate bill may place unrealistic burdens on new sources (particularly, smaller sources) wishing to locate in certain areas.

• Alternatively the Administration position allows each State and local area to decide for itself, in light of their particular environmental, economic, and social circumstances, the extent to which they will require new source growth to achieve overall reductions. The State and local officials are in the best position to balance their environmental and economic goals as they prepare appropriate attainment strategies.

Title I

Issue: Transport Areas This amendment establishes the Northeast Corridor ozone transport region, minimum State Implementation Plan requirements, as well as, the authority to establish other transport regions.

Senate Bill	Administration Position
- Creates transport region in 12 NE states (CT, DE, ME, MD, MA, NH, NJ, NY, PA, RI, VT and VA) and the District of Columbia. Administrator may add other States and may create other regions.	- Same, but adds VA (outside the CMSA for the District of Columbia) from NE region.
- Within two years of enactment, States in region must require: • I/M in all MSA's over 100,000 population • Statewide Stage II on gas stations with thruputs >20,000 gal/mo. •RACT-- ••sources covered by pre-enactment CTG's ••on VOC or NOx sources covered by post enactment CTG's ••on 100 tpy or more non-CTG VOC sources	- No minimum control requirements
- In each transport region Administrator creates commission which develops control plan of additional measures needed to bring area into attainment. Commission may remove areas from the Region.	- Same, except that Administrator may remove States from region.
- Upon plan approval Administrator requires States to adopt SIP revisions containing measures in commission's plan.	- Same
- Exempts area which demonstrate to EPA that their sources do not contribute to transport in region.	- Same

Why the Administration's Position is Better

- The major difference between the two approaches is that the Senate is very precise in specifying control measures and the Administration is not. Thus flexibility to respond to concerns of individual States and Regions is hampered in the Senate Bill.

- The Administration position recognizes that it is difficult to determine the extent or degree of controls required before the regional modeling analyses are available. In particular, preliminary results of regional modeling could call into question the efficacy of requiring VOC RACT and Stage II controls in areas meeting the NAAQS. The Administration position recognizes the fact that these results must be understood and that agreement must be reached among the States before control measures can be implemented equitably.

Issue: Percent Reduction Requirement. This section establishes the minimum volatile organic compound (VOC) annual emission reduction requirement in ozone nonmattainment areas.

Senate Bill	Administration Position
- Applies to areas above .144 ppm (serious, severe and extreme).	- Applies to areas above 0.135 ppm (moderate, serious and severe).
- Requirement is 12 percent over 3 years, or 4 percent per year on average, starting in 1990.	- Rate is 15 percent over first 5 years and 9 percent over each subsequent 3-year period, or 3 percent per year on average, starting in 1991. After 1995, smaller percentage allowed if 3 percent shown "infeasible" or not necessary to achieve attainment.
	- Does not allow credit for FMVCP, RVP, correction of SIP deficiencies and current I/M programs.
- No adjustment to baseline.	- Adjusts baseline by removing reductions from FMVCP and RVP.
- Allows banking of excess reductions from one 3 year period to the following 3 year period.	- Allows banking of excess reductions occurring in first 5 year period to be used in following 3 year period.
- Subject to Administrator's approval, allows 1 to 1 substitution of NOx (other than NOx reductions from FMVCP) if area shows equivalent or better reduction in ozone	- Same except that NOx substitution not allowed until after 1995.

Why the Administration's Position is Better

• While the bills have differing required rates of reduction, the result of the two by 1995 is very similar.

•• The Senate bill results in a 24 percent (6 years x 4 percent) reduction requirement plus the RVP reduction (typically about 14 percent) for a total of 38 percent.

•• The Administration bill's results in about 40 percent in 1995.

•• Typical cities should achieve at least this much reduction by 1995 from mandatory measures in either bill.

- From 1995 on, the Senate rate becomes much more difficult to achieve as reductions from the FMVCP and RVP controls disappear and growth begins to have a significant effect.
- Unlike the Administration position, the Senate bill does not provide the feasibility exemption to help areas where tight controls have already been applied.
- The Administration's position also provides relief for less severely polluted areas where less than a 3 percent rate is needed to achieve attainment.

Title I

Issue: Deadlines and Control Programs. These provisions establish, according to the severity of any ozone nonattainment area violations, various emission reduction requirements, under established timeframes.

	Senate Bill	Administration Position
Ozone		
Classification	Moderate	Marginal
Design value	≤0.144 ppm	≤0.13 ppm
Attain. date	5 yrs after enactment	12/31/95
# of N/A areas*	61	32
Control requirements	Emission inventories; emissions statements, fully implement all provisions of SIP; corrections to RACT requirements; auto registration fee; stationary source emissions fees; permits program w/ fees; Enhanced I/M or Stage II (except if not needed for areas < 0.13 ppm)	Corrections to existing SIP; permits program w/fees; emission statements.
Classification	Serious	Moderate
Design value	>.0144-≤0.18 ppm	0.14-0.15 ppm
Attain. date	10 yrs after enactment	12/31/95
# of N/A areas*	36	38
Control requirements	Above plus expanded inventory to include sources located within 25 mile radius around the MSA or CMSA (if applicable);	Above plus 3% annual emissions reductions averaged over 5 years, continuing until attainment date; RACT on 100

		tpy VOC sources
	RACT for 25 tpy VOC sources not under CTG's & 100 tpy NOx sources; $5,000 excess emissions fee per ton per yr. for each stat. source if no attainment; 4% annual reduction for VOC (averaged over a 3-year period); attainment demonstration based on photochemical grid modeling; annual reports on implementation; enhanced I/M and Stage II	
Classification	Severe	Serious
Design value	>0.18≤0.26 ppm	0.16-0.18 ppm
Attain. date	15 yrs after enactment	12/31/2000
# of N/A areas*	3	27
Control require-ments	Above plus TCM's to offset growth; employer car ridership programs.	Above plus enhanced I/M; 3% reductions averaged over each 3-year period up to attainment date; attainment demonstration based on photochemical grid modeling; clean fuel vehicle program; transportation control program to the extent needed to offset unexpected emissions from vehicles.
Classification	Extreme	Severe
Design value	>0.26 ppm	≥0.19 ppm

Attain. date	Expeditiously as practicable but no later than 12/31/2010	
20 yrs after enactment		
# of N/A areas*	1	4
Control requirements	Above plus expanded boundaries to include 25-mile radius around MSA or CMSA (unless State shows expansion is not necessary); RACT applies to 10 tpy VOC & NOx sources; 4% annual reduction for NOx (averaged over 3-year period); offsets requirement applies to NOx as well as VOC.	Same as Serious category.

Carbon Monoxide

Classification	Moderate	Moderate
Design value	≤14.0 ppm	9.5-16.4 ppm
Attain. date	5 years after enactment	12/31/95
# of N/A areas*	34	39
Control requirements	Emissions inventories; retain I/M where applicable fully implement all previous SIP submittals; auto registration fee; stationary source emissions fee; operating permit requirements; attainment demonstration; contingency measures; audits	Emissions inventories; retain I/M where applicable

	of SIP's by EPA; I/M;	
Classification	Serious	Serious
Design value	>14.0 ppm	≥16.5 ppm
Attain. date	10 yrs after enactment	12/31/00
# of N/A areas*	10	5
Control requirements	Above plus transportation control measures; employer ridership program.	Above plus enhanced I/M; attainment demonstration; same transportation control measures; oxygenated fuels.

Why Administration's Position is Better

• Both the Senate bill and the Administration positions utilize a "classification system" to associate control requirements with the severity of the nonattainment problem. However, in the classification dealing with the least severe problems, the Senate bill appears to allow approximately twice as many areas to avoid the minimum rate of progress requirement as the Administration position. It is uncertain how much the enhanced I/M or Stage II requirement would compensate for the lack of a minimum rate of progress requirement.

• The Senate bill requires a greater resource commitment for moderate areas and allows them less flexibility.

• The Senate bill's severe and extreme categories appear to cover the same degree of nonattainment as the Administration position's severe category. The extra category seems to be unnecessary since both only cover four areas.

• The Administration position recognizes that many existing less serious CO nonattainment areas will reach attainment without additional significant programs imposed on them. The Senate bill would impose additional programs on many of these less serious areas.

*Numbers of nonattainment areas are estimated based upon currently available ozone and carbon monoxide ambient air quality data.

FEDERAL IMPLEMENTATION PLANS

Senate Bill 1630	Administration Position
- EPA has discretion to do FIP's in case of failure to submit a SIP, the SIP is not in accordance with requirements, or the SIP is not being implemented.	- Same, except not for failure to implement SIP (since no deficiency in the plan itself but rater in carrying out plan).
- FIP's mandatory within 3 years after imposition of sanctions for State failure to submit all or portion of a plan. Attainment demonstration may be delayed for up to 3 years from initial proposal.	- Discretionary after reasonable efforts determination and upon consideration of several specified factors. Must result in significant additional progress toward meeting requirements of the Act.

Why Administration's Position is Better

• The Administration's position affords needed flexibility for EPA to address FIP problems on a case-by-case basis. With this flexibility, any FIP promulgation can be based on the merits of each case.

• The Administration's position also recognizes that EPA is sometimes not well situated to step in and attempt to develop and implement a comprehensive control plan since the States are generally far better acquainted with air pollution problems and sources in the area.

• Prior to promulgation, the Administration's bill requires EPA to consider the practicality of and benefits associated with issuing, implementing, and enforcing the FIP. · Factors to consider include the severity of the nonattainment problem, the amount of time remaining before the attainment date, the amount of emissions reductions that would be achieved, costs, the State's efforts to cure the problem, and whether there are reasonable alternatives.

Senate Bill	Administration Position
- Failure to submit, obtain SIP approval, or implement the SIP: construction ban*, highway funding*, air grants	- For failure to submit, obtain SIP approval, or implement the SIP: If Administrator makes discretionary finding of lack of reasonable efforts, at least one of the following shall be imposed: construction ban, highway funding, air grants, or public water supply hook ups
- Failure to obtain required emission reductions in ozone SIP: construction ban*, highway funding limitations*, annual audits*, possible employer based trip reduction programs*, change major source definition, meet severe or extreme area requirements, possible emission fees	- For failure to obtain required reductions in an ozone SIP, the Administrator could make a finding of lack of reasonable efforts to implement SIP (if the is the case), thereby triggering at least one of the above four sanctions. Also could call for State to revise SIP.
- Failure to achieve required emission reductions or milestones in CO SIP: construction ban*, highway funding*	- Same as directly above for ozone.
- Failure to attain ozone standard by deadline: reclassify to higher classification*, emission fees imposed*	- Reclassify to higher classification appropriate for air quality design value*, $5000/ton excess emissions fee for sources in severe areas failing to attain*
- Failure to attain CO standard by deadline: moderate areas reclassified as serious*, serious areas submit new attainment SIP with annual 5% reduction in CO emissions*	- Moderate areas are reclassified to serious; serious areas submit new SIP containing additional measures prescribed by Administrator

Why the Administration's Position is Better

• Both bills recognize the importance sanctions play in encouraging the successful development and implementation of nonattainment area plans. However, the Administration Position contains one additional general use sanction, public water supply hook up restrictions, which would extend the effectiveness of the whole sanction program.

• The major difference in implementation of sanctions is that the Senate Bill requires, without discretion, application of multiple sanctions upon a State failing a requirement.

• Alternatively, the Administration position is that the sanction(s) should "fit" the failure and that generally sanctions should only be applied where State is not making reasonable efforts to correct the failure. That is, the appropriate sanction or number of sanctions properly applied to correct the failure is better than a "shot gun" or "one-shoe-fits-all" approach.

* Nondiscretionary

Title I

Issue: Inspection Maintenance. Requires improvements in existing vehicle inspection programs or programs to be started in other cities.

Administration Position	Senate Position
Enhanced I/M required in Serious and Severe ozone and Serious CO areas, if population greater than 200,000.	Enhanced I/M required in 0.13 or worse ozone areas, except marginal areas with no current program may substitute Stage II; also all CO areas; and all Northeast Transport Region MSAs (even if attainment).
Minimum coverage is urbanized portion of nonattainment area.	Minimum area of coverage is MSA/CMSA; population cut-off is 100,000.

Why Administration's Position is Better

- Essentially no new I/M programs would be Federally required under Administration bill; all areas that would need to enhance currently have programs. Also, no geographic expansion would be required.
- Of course, states may choose to start new programs, expand areas of coverage or enhance current programs at their own discretion, for example, to meet the annual percent reduction requirements.
- The Senate bill would force at least 15 and as many as 34 metropolitan nonattainment areas to start new programs (19 areas must choose either enhanced I/M or Stage II). In addition, 32 attainment areas would be required to start programs in the Northeast Transport Region.
- The Administration believes that, except for areas with serious nonattainment, decisions on whether or not to implement I/M programs, as opposed to other possibly more cost effective measures, are best left to state and local officials.

Title II

Issue: Automobile Tailpipe Standards. Requires more stringent controls of exhaust pollutants from new cars.

Administration Position	Senate Position
Adopts tighter HC and NOx standards (0.25 and 0.7 gm per mile) for cars beginning in 1993 (phased in 1993-1995)	Adopts 0.25 HC and 0.40 NOx standard for 1993-2002
Useful life for cars limited to 5 years or 50,000 miles	Adopts 0.125 HC, 0.2 NOx, and 1.7 CO standards for 2003 and later Useful life for cars extended to 10 years or 100,000 miles

Why Administration's Position is Better

- Further tightening of HC standards beyond 0.25 may not be feasible and will certainly be expensive ($500 per car)
- Further NOx control beyond 0.7 gm/mile is not necessary or cost effective
- Tighter CO control below 3.4 gm/mile should focus on cold temperature control
- Extended useful life may not be feasible with much tighter standards

Titles I & II

Issue: Vehicle Refueling Control. Requires control of gasoline vapors during refueling.

Administration Position	Senate Position
Require use of Stage II gasoline pump controls in all moderate, serious and severe ozone areas	Onboard refueling controls required on vehicles beginning with 1993 model year Stage II required in all serious and above ozone areas and in areas between 0.13 and 0.14 ozone if they do not implement enhanced I/M Stage II must be implemented statewide in the entire Northeast Transport Region

Why Administration's Position is Better

- Stage II controls preferred due to ability to focus controls on areas where needed
- Stage II controls have been or are being put in place in many nonattainment areas (California, New York, New Jersey and St. Louis)
- Not clear Statewide Stage II is useful for ozone in Northeast Transport Region

Title II

Issue: Clean Motor Vehicle Fuels. Reconcile the automobile with the environment by introducing cars which operate on clean fuels in the nine dirtiest cities.

Administration Position	Senate Position
Automakers to produce and offer for sale 500,000 clean fuel vehicles in 1995, 750,000 in 1996, and 1 million in 1997 and beyond in 9 worst ozone cities	No specific alternative fuel program
Vehicles must meet EPA promulgated emission performance standards designed to achieve 30% reduction of ozone and 40% reduction of toxics in first phase (1995-2000) and 80% reduction of ozone and 90% reduction of toxics in second phase (past 2000)	EPA has authority to regulate fuel quality; also has very stringent post 2000 tailpipe emission standards
EPA to require general availability of fuel in the 9 cities (authority to expand to major transportation corridors for second phase)	
States to assure fuel use	
Fuel and technology neutral	

Why Administration Position is Better

- Clean alternative fuels are the only cost effective way of achieving the auto emission reductions needed in our worst polluted cities
- Clean fuels are cheaper ($300 per car of less) than Tier II tailpipe standards ($500 per car), are a proven technology and would be targeted to areas needing them most
- Clean fuels cars would have 70% less emissions of ozone precursors than gasoline cars meeting the very stringent Tier II standards
- Emissions of toxics from a clean fuel car will be 90% better than a gasoline car

Title II

Issue: Carbon Dioxide Tailpipe Standards. Requires for the first time control of emissions of carbon dioxide; this is essentially a requirement to improve fuel efficiency.

Administration Position	Senate Position
No provisions included	Establishes the following CO2 standards, to be met on average by each manufacturer of passenger cars: Grams per mile 1996: 266 gpm 2000: 220 gpm Equivalent to (miles per gallon) 33 mpg 40 mpg

Why Administration's Position is Better

- It is premature to legislate specific control measures to address global warming; international negotiations are underway and should be completed prior to unilateral U.S. action.
- Fuel economy requirements raise significant non-environmental questions that need to be cafefully considered, such as feasibility, cost and the competitiveness of the domestic auto industry with foreign manufacturers.

Title III

Issue: Residual Risk: This provision sets the requirements for evaluating source residual risk(s).

Senate Position:

The Senate position would evaluate the residual risk remaining within 3 years after the promulgation of technology based emissions standards.

The Senate bill has two "bright line" risk goals for carcinogens. Costs and technical feasibility cannot be taken into consideration in the development of standards.

Sources would have to demonstrate that the added risk of cancer for the individual most exposed their emissions is less than a 1 in 10,000 or be subject to additional regulations to which would reduce emissions to achieve this risk goal. Upon failure to demonstrate less than 1 in 10,000 risk, the source could apply for a one time only five year extension based on economic hardship.

All sources that exceed 1 in 10,0000 cancer risk to the most exposed would be subject to additional regulation. These sources, however, can receive a temporary exception from the standard and renew their exception each time their permit is reviewed (usually every 5 years) if they show that all available control measures to reduce emissions have been taken.

Administration Position:

The Administration position would evaluate the residual risk remaining within 7 years after the promulgation of technology based MACT standards.

This evaluation would be determine whether the source presents an unreasonable risk considering the uncertainties in the analysis, costs, technical feasibility as well as other factors.

Rationale for Administration Position:

- A standard of one in ten thousand lifetime risk would likely result in many plant closures manufacturing industries.

  Bright line limits, such as the one in 10,000 or one in a million lifetime risk limits in the Senate bill, put too great an emphasis on EPA's ability to exactly estimate the risks posed by the emissions of different pollutants. These estimates are highly uncertain and are inappropriate for use in this fashion.

- The Administration's proposal allows for a proper balancing of reductions in the risk to public health and the cost and technical feasibility of achieving such reductions.

Title III

Issue: Maximum Available Control Technology. This provision establishes the authority for EPA to set emission standards for various categories of air toxic sources.

Senate Position:	Administration Position:
The Senate position is similar to the Administration position. Cost and other impacts are considered in the definition of emissions standards. The Senate bill refers to these definitions as emissions standards rather than MACT. The Senate definition of emissions standards is:	Maximum Achievable Control Technology (MACT) is the term given to the technology based standards under the Administration proposal. MACT standards take into consideration cost, any non-air quality, and other air quality related health and environmental impacts, and energy requirements. The Administration's definition of MACT is:
Emissions standards for <u>new sources</u> must be no less stringent than the emission control achieved in practice by the <u>best controlled similar source</u> and can be more stringent.	MACT for <u>new sources</u> must be no less stringent than the emission control achieved in practice by the <u>best controlled similar source</u> and can be more stringent.
For <u>existing sources</u>, emission standards can be less stringent if the Administrator determines that the level of control applicable to new sources is technically or economically infeasible for existing sources.	MACT for <u>existing sources</u> can be less stringent than for new sources but must be no less stringent than the emission control achieved in practice by the <u>best controlled similar sources</u> and can be more stringent.
The Senate proposal has a benchmark of 90% reduction from uncontrolled emissions which "is an appropriate benchmark for emissions standards applicable to existing sources."	

<u>Rationale for Administration Position:</u>

- Rather than adopt a standard that is already in the Clean Air Act such as BACT or LAER, the Administration proposal has adopted a new standard that is free from all of the case law interpretive baggage associated with these terms.

- The Administration proposal on MACT is very clear, requiring the very best control for new sources with only a slightly lesser standard for existing sources.

- The Senate and Administration positions on this issue are very close and in practice would likely function in a similar manner.

Title III

Issue: Utilities. **This section establishes a seperate category relating to the requirements under which emissions would be controlled from utility and industrial boilers.**

Senate Position:	Administration Position:
The Senate bill would create a specific definition of electric utilities which would include major utilities and many industrial boilers (i.e., electric generating facilities producing 25 MW or more).	The Administration proposal defines electric utilities similar to the Senate proposal.
The Senate bill would create a 3 year exemption from MACT standards for electric generating facilities for chlorine and chlorine compounds but other toxics emitted from utilities could be regulated sooner.	The Administration's proposal calls for a study to be done on the health risks associated with the emissions of air toxics from electric utilities.
Regulation of electric utilities for air toxics would not be discretionary under the Senate bill.	Electric utilities are exempt from MACT standards unless standards are deemed warranted by the results of this study. The study is due 3 years after enactment.

Rationale for Administration Position:

- Electric utilities have already been singled out for regulation under Title V of the Administration's proposal (acid rain) and will already be facing billions of dollars in control costs.
- Utilities do emit a variety of toxic chemicals including acid gasses and metals. While improved controls which reduce these emissions have recently been applied to utilities, the acid rain program will reduce some of these pollutants even more.
- The exposure to air toxics from utilities could be low for many toxic compounds in the vicinity of power plants. If MACT controls were required they could cost as much as $7 billion per year in addition to costs associated with the rest of the bill.
- The Administration approach allows the needed flexibility to address this potential problem without mandating expensive controls that may be unnecessary.

Title III

Issue: Timing of Regulation. This provision establishes the timeframes and number of source categories for which emission standards would be promulgated and the timeframes for affected sources to comply with the standards.

Senate Position:

The Senate proposal creates a schedule for the promulgation of MACT standards as follows:

- source categories emitting certain pollutants within 2 years
- 25% of the source category list within 3 years
- 50% of the source category list within 5 years
- 100% of the source category list within 10 years*

* EPA would have no discretion over whether to promulgate MACT standards for the last 50% of the source category list.

EPA would be required to publish when each source category would be regulated within 2 years

Administration Position:

The Administration proposal creates a schedule for the promulgation of MACT standards as follows:

- 10 source categories within 2 years
- 25% of the source category list within 4 years
- 50% of the source category list within 7 years
- 100% of the source category list within 10 years*

* EPA would have discretion over whether to promulgate MACT standards for the last 50% of the source category list but explanations would be published for each source category not regulated.

Rationale for Administration Position:

- The Administration position sets up a schedule for the promulgation of MACT standards that is both tough and reasonable from an administrative standpoint.
- MACT standards will take considerable staff effort and resources to promulgate. In addition, the review of negligible risk waiver applications and review and response to comments on each standard will add even more burden to this schedule. EPA resources will be severely strained even within the Administration's time-frame. The accelerated schedule proposed by the Senate provides little in terms of actual environmental gains but threatens to create a regulatory backlog.
- Both bills would address 100% of the source categories within 10 years. From an environmental perspective there is little difference between the two positions in that the vast majority of the health risk is associated with the worst 50% of the source categories. The Administration proposal is more realistic in terms of EPA's resources.

- By not specifying in the legislation the exact pollutants and source categories to be regulated within two years, the EPA can select categories for which the regulations will achieve the greatest reduction in exposure of the public to air toxics.

Title III

Issue: Accidental Release Investigation Board. This amendment establishes a Board with authority to investigate accidential releases.

Senate Position:	Administration Position:
The Senate bill would establish a Chemical Safety Board. The board would be an independent board of 3 members appointed by the President.	The Administration bill would establish an Air Pollutant Release Investigation Board to investigate major, life-threatening releases of air pollutants. This board would be made up of 3 members selected by and reporting to the Administrator.

Rationale for Administration Position:

- The Administration proposed accident release investigation board is similar to that proposed by the Senate except that the Administration's board would be appointed by and report to the Administrator while the Senate board would be independent (i.e., appointed by the President).

- An independent accidental release board unnecessarily adds yet another investigative body into an already crowded area. Several agencies, including the EPA, have active accidental release programs. Establishing this board as part of EPA does not reduce its integrity and augments rather than duplicates existing accidental release programs.

Title III

Issue: Number of Regulated Source Categories. This section defines the number of additional source categories and/or pollutants which are subject to regulation.

Senate Position:

The Senate proposal requires EPA to promulgate regulations for 100% of the listed source categories within 10 years of enactment. No regulatory discretion is provided.

Administration Position:

The Administration proposal requires that within 7 years of enactment the Administrator must review source categories for which no regulatory action has occurred and designate additional source categories which warrant regulation and those that do not warrant regulation. Emissions standards for the source categories which warrant regulation must be promulgated within 10 years of enactment. The EPA must also publish explanations within 10 years for any source category not designated for regulation.

Rationale for Administration Position:

- Initial analyses indicate that approximately 80% of the risk will be reduced by the emission standards applied to the first 50 percent of the source categories. The EPA will regulate additional source categories on the last 50% of the list if warranted by the potential public health risk.

- The list of major source categories will be developed based on preliminary data. As better data is obtained there needs to be a way to avoid having to regulate sources that did not belong on the list in the first place.

- Many of the listed pollutants have thresholds below which there are no adverse health effects. As better information is developed on health thresholds and on the emissions from the listed major source categories, it may become apparent that there is no public health risk from certain industries. There needs to be flexibility to avoid using scarce resources to regulate these industries.

Title III

Issue: 90% Voluntary Reduction. This amendment provides credits to existing sources, who voluntarily reduce air toxic emissions, towards the Maximum Available Control Technology requirements.

Senate Position:	Administration Position:
The Senate Bill would allow an existing source to comply with the technology based emissions standards upon a showing of 90% voluntary emissions reduction (95% for particulate).	The Administration proposal would allow an existing source to comply with MACT standards by demonstrating a 90% plant-wide emissions reduction (95% for particulate).
To qualify for the exemption, the voluntary reduction must take place between 1985 and 1992.	To qualify for the exemption, the voluntary reduction must take place between 1987 and the proposal of relevant MACT standard.

Rationale for Administration Position:

- Both the Senate and Administration proposal would allow sources to comply emissions standards upon demonstrating a 90 percent reduction of listed pollutants (95% for particulate matter).
- These proposals are designed to allow sources the flexibility to design and implement their own pollution prevention and pollution control strategies.
- The only difference between the proposals is the timing of the voluntary reductions. This is an important point to consider when selecting which pollution reduction measures could be credited towards the 90% goal. The Senate proposal explicitly states that data satisfying all the requirements of the Superfund Section 313 "Right to Know" rule, shall be considered "verifiable and actual." The Administration proposal does not automatically accept this information without separate verification because some of the the reported emissions data may be inaccurate.

Title III

Issue: Area Sources. This provision gives EPA the authority to evaluate and control air toxic area source (e.g., dry cleaners, etc.) categories and pollutants.

Senate Position:	Administration Position:
The Senate proposal has similar provisions for listing area source categories and the application of Generally Available Control Technology. The Senate proposal contains extensive provisions related the area sources (subsection k). These provisions would require the establishment strategy for the identification and control of air toxics emissions from area sources. Some of the provisions of this strategy include the establishment of a large monitoring network for air toxics in metropolitan areas with population greater than 250,000. Research is required on the health risks from area sources. Reports are due to Congress at 2 years, 3 years, 8 years and 10 years after enactment. Results of the monitoring and research studies will be used to identify at least 10 area source categories and list them for regulation. The goal of this strategy is to reduce the risks from area sources by 75%.	The Administration proposal would list area source categories (numerous small sources which in aggregate contribute to public health risks usually in urban areas, e.g., drycleaners) along with major point source categories. Area source categories would be regulated similar to major point source categories. The main difference is that while MACT standards must be applied to major source categories, the Administrator may choose to apply Generally Available Control Technology (GACT) to area sources.

Rationale for the Administration Position:

- The Administration bill would result in substantial reductions in the emissions and risk associated with area sources.
- The area source program created by the Senate proposal would be extremely costly to State and local governments well as the Federal government. It is not clear what if any benefits this program will have on the reduction of risk from area sources.
- The EPA has an existing urban air toxics program focused on the study and mitigation of urban air toxic problems. While the Senate bill would greatly increase the size of this program,

Title III

Issue: Accidential Releases. This section establishes requirements for EPA to publish regulations and criteria for the detection and prevention of air toxic accidential releases inclucing Superfund sites.

Senate Position:

The Senate bill requires EPA to propose in twelve months and publish in 24 months, guidance on the preparation of hazard assessments.

The Senate bill requires a list of no less than 50 substances also to be derived from the Superfund Extremely Hazardous Substances list to be published within 24 months. This list would be reviewed every 5 years and establish threshold quantities.

Each site at which a listed substance is present above a threshold quantity must submit a hazard assessment within 1 year after the substance is listed and update these documents every two years.

Administration Position:

The Administration bill contains accidental release provisions which require the EPA to promulgate within 3 years "reasonable regulations and appropriate guidance" to provide for the prevention and detection of accidental releases into the ambient air.

The Administration bill would require EPA to publish as part of the regulations above an initial list of significant air pollutants reasonably anticipated to cause serious adverse effects to health or environment. The list must be derived from the extremely hazardous substance (EHS) list under Section 302 of Superfund. The list must be revised from time to time and reviewed every five years. Each substance also must have a threshold quantity established. The threshold quantity would determine which sources will be subject to the regulations.

These regulations would apply to source categories subject to MACT standards.

Rationale for Administration Position:

- The Administration position appropriately requires EPA to use whatever existing authorities are available to address the problem of accident prevention and to coordinate with other involved agencies to reduce duplication of effort.

- The immense paperwork burden of requiring hazard assessments of each covered facility (with biennial updates) is a significant addition to the existing authorities and it is unclear whether this adds anything to accident prevention.

- In addition to existing Federal authorities in this area, existing tort liability plays a major role in ensuring that industries minimize the potential exposure of the public to

accidental releases of toxic substances. The Administration position allows for the development of reasonable regulations which would not undercut tort liability or duplicate the efforts of other programs.

Title IV

Issue: Permits Title in General. What are the principal advantages of the Permits Title.

Administration Position	Senate Position
Include a separate Permits Title that requires major sources, and certain other sources, to obtain operating permits.	Same.

Rationale for the Administration's Position:

The permit system will make pollution controls much more enforceable:

o Under the current SIP system, a company's pollution control requirements are often scattered throughout numerous hard-to-find parts of the SIP and other Federal requirements. In addition, SIP requirements are often phrased generally, so that how they apply to specific companies is often ambiguous.

o The permit system will fix this problem by requiring that each company hold one document--the permit--that clearly describes all of the company's pollution control requirements, ranging from pollution controls to recordkeeping.

o Under the current SIP system, there generally is no requirement that a company periodically report on the extent to which it is complying with its pollution control requirements.

o The permit system will fix this problem by requiring periodic compliance reports.

The permits system will make it easier to change pollution control requirements:

o Under the current SIP system, virtually all changes that a source needs to make to its pollution control requirements must be approved not only by the State, but also by EPA in accordance with notice-and-comment rulemaking. This process is cumbersome, may take 12-14 months, and in many cases longer.

o The permit system will fix this problem by placing a strict time limit--90 days--on EPA review of changes to pollution control requirements.

Title IV

Issue: Permits Fees. What are the principal advantages of the permits fees.

Administration Position	Senate Position
Require permitted sources to pay fees to the State or local governments to offset regulatory costs.	Same, with some technical differences concerning, for example, the minimum fee requirements.

Rationale for the Administration's Position:

o Permit fees help solve a major problem that has plagued pollution control efforts since the passage of the Clean Air Act in 1970--inadequate State resources to develop and implement pollution controls. The fee system is tailored so that companies pay only their share of the costs.

o The permit fee provisions build on existing Clean Air Act requirements that companies receiving a construction permit pay a fee to cover the permitting costs. In addition, many States have implemented operating permit fees.

o The Administration's proposal contains a minimum amount for the fees that must be collected to assure that the State's costs are covered. The Administration's proposal contains certain caveats that assure that the proper amount of fee is collected, for example, the State may collect a lesser amount if it demonstrates that the lesser amount is all that is needed to cover those costs. The Senate bill fails to include these caveats.

o The States are granted significant flexibility in designing the permit fee system. For example, States have flexibility in determining the time that the fees are collected, whether at the time the permit application is submitted, on an annual basis, a fee-for-service basis, and so on.

o The fees required under the permit program may be used only to cover the State's permit program costs. They may not be used for other purposes, such as balancing the State's budget.

o If the State fails to collect the fees, EPA is required to do so. This will ensure that each State imposes and collects the fees, and will eliminate the problem of one State seeking a competitive advantage over its neighboring States by not collecting the fees.

Title IV

Issue: The Veto. What are the principal advantages of the veto.

Administration Position	Senate Position
States are required to draft proposed permits, and then to submit them to EPA for a 90-day review. If EPA vetoes the proposed permit, the State must revise it to accomodate EPA's concerns. If the State fails to do so, EPA must issue (or deny) the permit.	Same.

Rationale for Administration's Position:

o Under the veto provisions, the State retains the primary authority for developing the permit. Moreover, EPA must review the State's work within 90 days. This system is much more expeditious than the current SIP system, where EPA must promulgate notice-and-comment rulemaking, which typically takes 12-14 months, or longer.

o The veto provisions are modeled after the Clean Water Act. EPA has used the veto under the Clean Water Act no more than a handful of times each year, yet the veto simply by its presence assures that EPA will fulfill the role Congress gave EPA of overseeing the State's work.

o The permit system builds in the flexibility needed to assure that the veto will not be overly intrusive to the States. EPA is authorized to waive the requirement that it review permits for any class of sources for which review is not necessary. EPA anticipates that review will not be necessary for permits that simply incorporate, without changing, SIP requirements or other Clean Air Act requirements. In addition, EPA anticipates working with the States, industry, and citizens groups to develop model or standardized permits, to eliminate the need for review of those types of permits.

o EPA anticipates working with the State during the permit process, as EPA has done under the Clean Water Act, so that in many cases, any EPA concerns over a permit will be communicated to the State before the State approves the permit. This process will further reduce the likelihood of EPA vetoes.

Title IV

Issue: The Permit Shield. What are the principal advantages of the permit shield.

Administration Position	Senate Position
The permit will contain all of the enforceable requirements that the company is subject to, and may also state that it replaces the provisions of the SIP or other Clean Air Act requirements that the company had previously been subject to (unless EPA provides by rule that the permit does not replace those other requirements).	Same.

Rationale for Administration's Position:

o The permit shield will provide certainty to the sources by assuring them that once they have obtained a permit containing all of the pollution control requirements applicable to them, the permit will override the SIP or other Clean Air Act requirements that would otherwise apply. This is appropriate given the fact that the company must go through a process of applying for, and receiving, the permit.

o However, if a mistake has been made in issuing the permit, the State has the authority to reopen and revise the permit. Moreover, if the State fails to do so, EPA has the authority to require the State to reopen the permit. Thus, the permit will not allow the company to take advantage of errors in issuance.

o Moreover, the Administration bill grants EPA the authority to promulgate requirements that limit the permit shield, and thus provide that the underlying SIP or other Clean Air Act requirements continue to apply in specific cases. Accordingly, if citizens groups believe that the shield is inappropriate in particular cases, they have the opportunity to present their views to EPA and request that EPA promulgate those regulations.

Title IV

Issue: Contiguous States. What are the principal advantages of the provisions requiring that contiguous states receive notice of the proposed permit.

Administration Position	Senate Position
The State that is issuing the permit must notify contiguous States of the permit, and to give them the opportunity to comment. If the contiguous States submit recommendations that the issuing State does not accept, the issuing State must explain its reasons. EPA, as it reviews the permit, will take the contiguous States' comments into account.	Same.

Rationale for the Administration's Position:

o The requirement to give contiguous States an opportunity to comment on pending permits allows them to protect their air quality if pollution from a company in the issuing State could jeopardize their ability to meet air standards.

o This requirement is generally consistent with provisions of the current Clean Air Act, found in section 126.

o The permit system allows contiguous States to submit recommendations that the permit-issuing State must take into account, and that EPA must consider if the permit-issuing State rejects. This right to comment does not mean that the contiguous States can unduly impede permit issuance.

o EPA is given the authority to eliminate the requirement that contiguous States be notified of pending permits in cases where the permit will not affect air quality in the contiguous State. Not every permit issued by every State might adversely affect each neighboring State's air quality, and EPA is working on criteria for deciding when contiguous States need not be informed of pending permits.

Title IV

Issue: Anti-backsliding. What are the principal advantages of the provisions imposing safeguards concerning the ability of sources to obtain relaxations in their permits.

Administration Position	Senate Position
Permit requirements cannot be relaxed from the previous permit, the SIP, or any other Clean Air Act requirement, except under narrow circumstances (company must demonstrate that relaxation does not interfere with any requirement under the Clean Air Act, and that existing limitation is not appropriate because, for example, changes occurred at the source, etc.).	Same.

Rationale for Administration Position:

o This system--known as the anti-backsliding provisions--will protect against undue relaxations, but nevertheless allow variances when they are justifible.

o The Clean Water Act includes a comparable set of provisions that has worked well.

o The permit system provides that once a permit has been issued, it can be reopened to, for example, correct an error. This provides a safeguard in case a permit is erroneously relaxed.

o However, a permit may not be revised to contain emission standards less stringent than the applicable standard under sections 111 or 112.

TITLE V

ISSUE: **TRADING** The buying and selling of emission allowances, directly effecting the legal amount of pollution a source can emit.

Administration Position

- Emission "allowances" can be traded between existing sources within two trading regions without EPA regulatory approval (only recording) during Phase II; exact geographical dimensions of the regions will be specified by regulation. Phase I trades are generally limited to a single state or company.
- New sources can obtain allowances from anywhere in the continental U.S.
- Inter-pollutant trading is allowed at a ratio of 1.0 ton of SO_2 for 1.5 tons of NO_x; procedures to be followed will be specified by regulation.

Senate Position

- Trading is allowed and there are no significant differences from the Administration proposal, except that there are no Phase I restrictions in the Senate Bill.
- The Senate Bill also provides for interpollutant trading.

The Importance of This Provision:

- The main advantage of trading is to minimize emission control costs by allowing utilities maximum flexibility in selecting emission control strategies, including the "purchase" of reductions from sources that can most cost-effectively make those reductions.
- Allowance trades do not require case by case regulatory approval by EPA as do traditional emission trades; thereby greatly facilitating their use.
- It is prudent to have two trading regions (East and West) for existing sources since there are significant economic and environmental differences between the two regions which trading might negatively impact. For example, high sulfur coal mining in the East could be more severely impacted and visibility could be further degraded in the West by extensive trading between existing Eastern and Western sources.
- Finally, trading is essential to ensure the workability of the SO_2 emissions cap. Without trading some of the states would find it much more expensive to meet new energy demand and maintain the cap.

TITLE V

ISSUE: **NUMBER OF PLANTS IN PHASE I** The number of plants that have affected units that must comply with Phase I requirements.

Administration Position

- Phase I has 107 affected plants (255 units) in 20 states.
- Plants are included for Phase I if their units were larger than 100 MW and their actual 1985 SO_2 emission rate was equal to or greater than 2.50 lb SO_2/mm Btu.
- Allowances for Phase I are calculated by multiplying a 2.50 lb/mm Btu SO_2 emission rate by the average annual heat input for 1985-1987.

Senate Position

- Same as Administration proposal.

The Importance of This Provision:

- Including emission reductions already achieved by utility and industrial sources since 1980 and expected from the desulfurization of diesel oil, additional utility reductions in Phase I are designed to achieve a total of about 3 to 4 million tons of the Title V 10 million ton SO_2 emission reductions. In order to minimize costs and spread the burden, these reductions should be achieved at plants with high emission rates (where control costs are generally the cheapest) and from a large number of sources.
- The use of the 107 plant approach involving 255 units in 20 states spreads the burden of control more equitably compared to earlier proposals that only involved 20 plants in Phase I. Under this approach all options for emissions control as well as emission reduction trading are available to the affected sources. Finally, spreading the burden in this broad and flexible way will minimize rate impacts of Phase I.

TITLE V

ISSUE: **THE CAP** Total tons of SO_2 emissions that must be met collectively by the utility industry on an annual basis.

Administration Position

- A cap on future utility SO_2 emissions is imposed since new sources are required to obtain allowances from existing sources to offset their emissions.
- Sources < 1.20 lb SO_2 and < 75 MW in size do not retain their allowances upon retirement, producing a utility cap of 5.1 million tons of SO_2. This 5.1 million ton cap was created by a drafting error. An 8.9 million ton cap was intended.

Senate Position

- Similar to Administration proposal, except sources < 1.20 lb SO_2/mm Btu receive allowances and can transfer them upon retirement. Therefore, the utility cap is closer to the intended 8.9 million tons of SO_2.

The Importance of This Provision:

- The cap is necessary to maintain the environmental gains that are achieved by the initial reductions under Title V.
- The cap provides incentives for energy conservation, control technology development, and trading of allowances. This provides environmental benefits and helps insure the workability of Title V.
- The restriction of units smaller than 75 MW and those with SO_2 emissions < 1.20 lb/mm Btu from transferring their allowances upon retirement producing, in the Administration proposal, a utility cap of 5.1 million tons was a drafting error. Therefore, the Administration prefers the Senate approach with the utility cap closer to the 8.9 million ton goal.

TITLE V

ISSUE: **COST SHARING** A technique for sharing the cost of pollution control. A fee is collected from a group of sources and a subsidy is paid to another group of sources to pay for installed controls.

Administration Position

- No explicit cost sharing is included.
- The allowance system and the cap taken together are a form of burden sharing where states whose emissions grow must obtain allowances from sources in other states. Part of the cost to states whose emissions grow will go to reduce costs for other states, while maintaining broad environmental protection.

Senate Position

- Same as Administration proposal.
- The Senate also adopted a sense of the Senate amendment implying that explicit cost sharing through a generation or emissions tax is not intended.

The Importance of This Provision:

- Under the Administration and Senate proposals costs are incurred if: (1) you have been a high emitter > 1.2 lb/mm Btu, or (2) your emissions increase in the future. We oppose suggestions to swap the cap for cost sharing; under such a swap: (1) those who cleaned up in the past would pay those who had not, and (2) maintenance of environmental gains would be lost.
- The polluter pays principal is more appropriate than cost sharing since utility customers in States with clean SO_2 sources are already paying for that control; cost-sharing would have them pay twice--and the second time would be for those who have not been paying for SO_2 control.

TITLE V

ISSUE: **HOARDING** The holding of unneeded allowances (rather than selling them) which prohibits others who need allowances from being able to purchase them on the open market.

Administration	Senate
o Hoarding is not explicitly addressed; the demand by new sources for allowances, the need to minimize costs, and competitive market forces are expected to prevent hoarding.	o EPA is designated as an allowance seller-of-last-resort to prevent hoarding. Allowances would be sold for $1500. A 2 percent withholding of allowances is used to cover any allowances that are sold by EPA.

The Importance of This Provision:

- The Administration believes the allowance system will work, and hoarding would not occur. About 200 companies all across the U.S. would hold tradeable allowances. Some may act in an economically irrational way and hoard allowances; all would not be expected to act this way.

- The Administration recognizes that some growth states are deeply concerned about the hoarding possibility. Therefore, the Administration supports the Senate's approach of withholding 2 percent of the allowances and having EPA be a seller-of-last-resort to provide a solution if hoarding should occur.

TITLE V

ISSUE: **BASELINES** Historical emissions, emission rates and heat input values that are used to classify sources and calculate allowances.

Administration Position

- Baselines can refer to emissions, emission rates, or annual heat input values. Baseline as used in the proposal refers to a boiler's annual average fuel consumption measured as heat input, taken from 1985-1987, recorded in DOE EIA Form 767.
- Allowances are the product of baseline heat input and an emission rate. For Phase I and Phase II affected sources, emission rates are 2.50 and 1.20 lb SO_2/mm Btu respectively.

Senate Position

- Same as the Administration.

The Importance of This Provision:

- Data availability and accuracy are important characteristics of baseline data.
- For emissions data, the 1985 NAPAP emissions inventory (version 2) is the most recent and accurate data available.
- For heat input data, the 1985-1987 information represents the most recent and accurate data available.

TITLE V

ISSUE: **ALLOWANCES** An allowance is defined as a ton of pollution (SO_2 or NO_x) that can be legally emitted.

Administration Position

- An allowance is an authorization to emit one ton of SO_2 or NO_x.
- Phase I allowances are specified in the bill for 107 plants with 255 units with 1985 SO_2 emissions >= 2.50 lb/mm Btu. These allowances equal 2.50 lb SO2/mm Btu times the average 1985-1987 heat input.
- Phase II allowances are to be calculated and specified by EPA for units with 1985 SO_2 emissions >= 1.20 lb/mm Btu and will equal 1.20 lb/mm Btu times the 1985-1987 avg. heat input.
- Units smaller than 75 MW and those with SO_2 emissions < 1.20 lb/mm Btu in 1985 are not covered by the allowance system. These units have the option of opting into the allowance system.

Senate Position

- Similar to the Administration proposal, except that units with 1985 SO_2 emissions <1.20 lbs/mm Btu are brought into the allowance system as follows: (1) Coal < a 1.2 lb/mm Btu get 120 percent of their allowances. (2) Oil and gas between 0.4 and 1.20 lb/mm Btu get 120 percent of their allowances. (3) Oil and gas < 0.40 lb/mm Btu get allowances based on 120 percent of their SIP level. (4) Gas (over 90 percent gas) must stay at their 1985 emission rate

Why the Administration's position is better:

- Once assigned, allowances can be bought and sold without EPA approval, greatly facilitating trading and lowering overall compliance costs.
- The ability to trade emissions easily through the allowance system provides a rational market for new sources to obtain sufficient allowances to operate, making the cap on emissions feasible.
- The Senate approach of bringing clean sources (units with 1985 SO_2 emissions < 1.20 lb/mm Btu) into the allowance system facilitates trading and allows the transfer of these allowances upon retirement of these sources. This approach is acceptable to the Administration, although there are other ways to accomplish this goal.

Title V

ISSUE: **CLEAN COAL TECHNOLOGY** An advance technology for burning high sulfur coal with minimal pollution emissions.

Administration Position

- 3-year compliance extension (to 12/31/2003), as well as additional allowances for repowered sources.
- Federal Energy Regulatory Commission (FERC) incentives would allow FERC regulated utilities to receive higher than usual rates of return, shorter amortization period, and preapproval of prudency if costs are within limit for repowering projects.
- Exemption from NSPS for all pollutants for repowered and CCT projects; exemption from NSR for all pollutants if potential emissions don't increase
- Streamlined environmental permitting where potential emissions increase.

Senate Position

- 4-year compliance extension (from 1/1/2000 to 12/31/2003) for re-powered sources.
- A unit with a 1985 emission rate less than 1.2 lbs/mm Btu which is awarded a clean coal technology demonstration grant as of 1/1/1991 by DOE may use any 3 consecutive years between 1980 and 1989 in calculating its baseline.

Why the Administration's position is better:

- DOE and vendor testimony indicate that an extension to 12/31/2003 is sufficient. Additional allowances would encourage use of repowering technologies that can result in lower emissions and expanded generating capacity.
- Use of any 3 consecutive years between 1980-89 to calculate baseline, as in Senate bill, is not a good idea because Form 767 fuel use data did not exist before 1982; and 1982-84 data is not quality assured and of poor quality.
- Administration Bill FERC incentives are needed to encourage utilities to undertake risky CCT projects. Exemption from NSPS and streamlined permitting are also needed to encourage CCT projects, and other innovative control projects so that companies aren't required to meet NSPS or BACT when cleaning up an existing plant or hit with new source requirements when they remove the CCT equipment at the end of a temporary demonstration.

TITLE V

ISSUE: **CLEAN STATES** A provision that exempts states, that had relatively clean emissions in 1985, from Title V requirements.

Administration Position

- No "clean state' provision; however, clean units (below 1.2 lbs/mm Btu) are not required to reduce their emission rate below their actual 1985 SO_2 emission rate, and may increase their utilization.

Senate Position

- Clean State provision for States with < 150,000 tons SO_2 emissions and over half of their generation scrubbed in 1985.
- Also sections 405(d), (e) and (f) basically provide clean units with 20% more allowances.

Why the Administration's position is better:

- The clean states provision in the Senate bill would allow some dirty units to escape clean up simply because they were in the same state as clean sources and would unnecessarily add approximately 200,000 tons of SO_2 emissions into the air each year, violating the Presidents commitment to a 10 million ton reduction.
- The Administration believes that giving clean units 20 percent additional allowances is reasonable recognition for past efforts and assistance for future growth.

TITLE V

ISSUE: NO_x CONTROL Provisions for controlling NO_x emissions.

Administration Position

- 2,000,000 tons NO_x reductions from levels in year 2000.
- By 12/31/2000, existing wall-fired (dry bottom) and tangentially fired coal-fired utility boilers with nameplate capacity of 75 MW or greater would need to meet NO_x emission rates equivalent to use of low NO_x burners.
- Units subject to the NO_x emission rate requirements may elect into the allowance system and obtain NO_x allowances based on 1985-87 fuel consumption and the NO_x rate specified above, rather than meeting a NO_x emission rate.
- Units may also elect into the allowance system and reduce SO_2 emissions instead of NO_x, at a 1 : 1.5 SO_2 to NO_x ratio.

Senate Position

- 2,000,000 tons NO_x reductions from 1980 levels.
- Each coal-fired affected unit as defined under Phase 1 and Phase 2 shall meet by 1/1/2000, a NO_x emission limitation based on its 1985-87 fuel consumption multiplied by 0.45 lbs/mm Btu for tangentially-fired boilers; by 0.50 lbs/mm Btu for dry bottom wall-fired boilers, or for all other boiler types, by their actual annual average emission rate, based on 1995 and 1996 CEM data, or such lower, more representative rate specified by the Administrator.
- Not later than 1/1/1994 EPA shall revise the NO_x NSPS for fossil fuel fired steam generating units (both electric utility and non-utility), and for large stationary diesel and turbine engines.
- Units may also reduce SO_2 emissions instead of NO_x, at a 1 : 1.5 SO_2 to NO_x ratio.

Why the Administration position is better:

- Senate bill requires about one million tons per year more NO_x reductions by 2000 than the Administration Bill, and is thus more expensive.
- Under the Administration proposal, a unit has the option of meeting a NO_x emission rate or electing into the allowance system and meeting a NO_x allowance; no such option is provided in the Senate bill.
- The Senate bill requirement to revise the NO_x NSPS is unnecessary because the current Clean Air Act already requires EPA to periodically review and revise, if appropriate, the NSPS.

TITLE V

ISSUE: **POST-COMPLIANCE CAP AND GROWTH FLEXIBILITY** The post-compliance cap is the total annual tons of SO_2 emissions that cannot be exceeded after the provisions of Title V are met. Growth flexibility refers to the room for new growth (increased future emissions from both new and existing sources) under this cap.

Administration Position

- A 10 million ton SO_2 reduction relative to 1980. About 1.1 million tons from non-utility industrial sources, 0.4 million tons from diesel desulfurization, and 8.5 million tons from utility sources.
- The remaining annual allowable emissions in the utility sector of about 8.9 million tons must not be exceeded. (Drafting error reduced cap to 5.1 million tons.)

Senate Position

- Similar to the Administration position (with drafting errors corrected) except for the "clean state credit" which doesn't appear to have any significant impact on long term emissions growth.

The Importance of This Provision:

- Maintaining the SO_2 reduction level is as important to the goals of the acid rain control program as meeting it. It is technically and economically feasible. Additionally, this provision will not jeapordize economic development.
- Under the SO_2 emissions cap, utilities are likely to minimize the amount of SO_2 emissions from each new coal unit by using new combustion technologies that reduce SO_2 emissions by 95 percent or more or by constructing advance scrubbers that reduce SO_2 by 95% instead of only 70% (in the West) and 90% (in the East) as required under NSPS.
- These internal offsets cost, on a dollar/ton removed basis, approximately $500.
- A new 500 MW coal fired unit (using 95 percent scrubbing) will require only about 2000-4000 and 1000 tons per year of external offsets using Eastern and Western coals respectively.
- The price of SO_2 offsets is expected to be in the range of $600 to $800/ton from 2000 to 2010.
- The price of SO_2 offsets is expected to decline after 2010 as older high emitting plants retire and make their allowances available.
- The total incremental cost of offsetting SO_2 emissions from new coal-fired units will add less than 5% to the baseline cost of each new unit. Typically this adds less than 2% to utility bills.
- It will still be cheaper to build and operate a coal plant than natural gas, combined-cycle, or nuclear.

TITLE V

ISSUE: **ELECTRIC RATE IMPACTS** Effects of Title V on electricity rates.

Administration Position

- The bill allows for maximum flexibility which allows least-cost emission control approaches and minimizes electric rate impacts.
- This flexible approach is estimated to cut overall costs by about 20 percent.
- On a national basis the acid rain bill adds less than 3 percent to the cost of electricity. Costs in specific locations will, of course, be higher or lower than the 3 percent. Electric rate impacts > 10 percent are expected to be rare.

Senate Position

- Similar to the Administration proposal; therefore, electric rate impacts are expected to be about the same.

The Importance of This Provision:

- The analysis of the Administration Bill covered both a maximum flexibility case and a case in which trading was "constrained" to within states or companies. The "flexible" case was 20 percent cheaper than the "constrained" case.
- Some utilities have calculated costs that are up to three times higher than those of the Administration. These higher cost are based on several different assumptions, such as: no interstate trading, a 5 percent reserve margin (over control) each year, different accounting procedures and inflation factors, and different SO_2 control costs.

Title VI

Issue:Clarification of 30-day Notice Provisions. This provision clarifies how penalties are assessed in relationship to the issuance of Notices of Violations.

Senate Bill, as Reported out on November 16, 1989	Administration Position
Clarifies that 30 day notice provision does not relieve a violating source from liability for pre-NOV penalties, and provides that the violation does not have to continue for 30 days after the NOV is issued to subject a source to enforcement action.	Same.

Why this Measure is Important:

- Strengthens EPA's enforcement authority significantly.
- No need to prove 30 day continuing violation to establish court jurisdiction.
- Serves as a greater deterent to violations of the Act.

Title VI

Issue:Expanded Administrative Compliance Order Authority. This subsection is amended to provide EPA the ability to resolve violations administratively while protecting against extensions of applicable compliance deadlines.

Senate Bill, as Reported out on November 16, 1989	Administration Position
Allows EPA to issue nonrenewable administrative orders of up to one year.	Same.

Why this Measure is Important:

o Important augmentation to EPA's ability to resolve certain violations more expeditiously and with greater flexibility.

o Gives EPA the option of resolving violations without having to utilize the greater resources necessary for a judicial action.

o Sources may apply for judicial review if desired; cost savings realized.

Title VI

Issue:Ensuring Full Enforceability of Stationary Source Statutory Requirements. This amendment ensures EPA's authority to enforce new requirements (e.g., permits, rules, etc.) provided for elsewhere in the Act.

Senate Bill, as Reported out on November 16, 1989	Administration Position
Authorizes EPA to commence civil and criminal enforcement for any violation of any requirement of Title I, III, IV or V of the Act.	Same.

Why this Measure is Important:

o Fills in certain gaps in the current statute.

o Ensures that all new requirements are enforceable both civilly and criminally.

Title VI

Issue:Enhanced Criminal Sanctions Authority. This provision gives EPA the authority to impose criminal sanctions under certain circumstances.

Senate Bill, as Reported out on November 16, 1989	Administration Position
Establishes new felony-level criminal sanctions for certain knowing violations of the statute, with a reference to Title 18 of the U.S. Code for appropriate penalty levels. Doubles the sanctions for second offenders. Misdemeanor-level sanctions for knowing violation of fee payment requirements.	Same.

Why this Measure is Important:

o Strengthens EPA's criminal sanctions for violations of the statute.

o Makes these sanctions more consistent with other environmental statutes.

o Criminal sanctions are EPA's greatest deterrent in encouraging environmental compliance.

Title VI

Issue:Administrative Penalty Authority. This amendment authorizes EPA to issue administrative penalty orders and to issue "field citations" when minor violations are discovered during inspections or for violations of record keeping and reporting requirements

Senate Bill, as Reported out on November 16, 1989	Administration Position
Provides new authority to issue administrative penalty order of up to $25,000 a day with a cap of $200,000. Section 120 penalties are still available. Penalty orders are reviewable and enforceable in district court.	Same, except cap for ALJ proceeding is amendable by EPA-DOJ agreement.
Field (i.e. on-site) citation penalty program, with citations of up to $5,000 authorized for categories of minor violations (to be defined by regulation) discovered during inspections, e.g. violations of routine reporting and record-keeping violations.	

Why the Administration's Position is Better:

o Gives EPA and DOJ greater flexibility with regard to choice of an appropriate enforcement response for categories of cases where the penalty sought would exceed $200,000 yet might be addressed more expeditiously through ALJ proceedings.

o Over the years, with inflation and as legal issues are resolved in the judicial actions, such an expansion of the administrative process will lead to move efficient and timely resolutiion of issues while preserving a source's right to seek judicial review.

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Title VI

Issue:Penalty Assessment Criteria. The new amendment clarifies the criteria for penalty assessments, as well as, clarifying how penalties are assessed in relationship to violations including multi-day averaging periods.

Senate Bill, as Reported out on November 16, 1989	Administration Position
Clarifies the specific criteria to be applied in assessing penalties. Confirms that the maximum penalty may be assessed for each day of each violation. Also clarifies that once EPA has made a prima facie case establishing a period of violation, the burden shifts to the defendant to prove that the violation was not continuous. Current Section 113(e) is repealed.	Same.

Why this Measure is Important:

o Conforms the explicit criteria to be used by courts in assessing penalties to other environmental statutes and to EPA's Clean Air Act Stationary Source Penalty Policy.

o Once evidence of the violation is established using the applicable test method, proof that the violation continued could include evidence other than the applicable test method (e.g. CEMS data where a stack test is the applicable method).

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Title VI

Issue: Informant Rewards. This subsection authorizes EPA to reward informants who provide information which leads to the convictions of Act violators.

Senate Bill, as Reported out on November 16, 1989	Administration Position

Does not contain this provision.	Authorizes the Administrator to offer rewards of up to $10,000 to individuals for providing information leading to criminal convictions or civil or administrative judgments of liability.

Why the Administration's Position is Better:

o Provides incentives to persons in the best position to have important information about violations to come forward with that information.

o It is an authority contained in numerous other environmental statutes.

o Greatly facilitates EPA's task of collecting information to prove violations.

Title VI

Issue: Reviewability of Administrative Orders. This provision provides that administrative orders issued under various Sections of the Act are reviewable in the courts.

Senate Bill, as Reported out on November 16, 1989	Administration Position
Codifies the case law providing that orders and other actions issued by the Administrator under Sections 113(a) (notices of violation, findings of violation, administrative orders), 167 (new source review orders), 303 (emergency orders), 307(a) (administrative subpoenas), 114, 206(c), and 208 (investigatory authorities), are not "final" agency action subject to pre-enforcement review in the circuit courts.	Same.

Why this Measure is Important:

o Ensures the expeditious resolution of Clean Air Act violations by preventing violators from initiating dilatory circuit court proceedings following the initiation of preliminary administrative responses to evidence of violations.

o Prospective defendants still able to challenge the merits of EPA orders, information requirements, subpoenas, and notices in the course of ALJ or district court enforcement proceedings.

o Judicial review of the underlying legal requirement remains available if commenced within 60 days of the promulgation of the requirement.

Title VI

Issue: Compliance Certification. This amendment increases EPA's authority to require additional source monitoring for the purposes of determining compliance.

Senate Bill, as Reported out on November 16, 1989	Administration Position
This section clarifies and confirms EPA's authority to require enhanced compliance monitoring, including continuous emission monitoring and compliance certifications, on a regular or periodic basis.	Same.

Why this Measure is Important:

o Clarifies the scope of EPA's authority to require sources to provide compliance information.

o Ensures access by EPA to valuable information in addition to that obtainable by on-site Agency compliance tests and inspections.

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Compliance certifications help EPA and sources identify misunderstandings regarding the applicable compliance requirements early on, thereby aiding in early compliance and obviating the need for enforcement.

Title VI

Issue: Contractor Inspections. This provision allows EPA to designate contractors as "authorizes representatives" when conducting source inspections.

Senate Bill, as Reported out on November 16, 1989	Administration Position
Amends §114 to confirm that EPA may designate contractor inspectors as the Administrator's "authorized representatives". They would be expressly subject to the same criminal sanctions for illegal disclosures as are EPA employees.	Same.

Why this Measure is Important:

o Augments limited number of EPA employees available to perform inspections and makes it mandatory that contractor inspectors be used.

o Makes clear that EPA can use contractors, overruling the adverse case precedent.

Title VI

Issue: Administrative Enforcement Subpoenas. This amendment provides EPA with the authority to issue administrative subpoenas in support of enforcement efforts and rulemaking activities.

Senate Bill, as Reported out on November 16, 1989	Administration Position
Amends §307(a) to give CAA enforcement officials the same subpoena authority as available under TSCA and CERCLA.	Same.

Why This Measure is Important:

o Administrative subpoena authority under the CAA currently limited to rulemaking activities.

o Would expand subpoena power to administrative enforcement actions, which is important given the increased administrative enforcement authority in the Amendments.

Title VI

Issue: Scope of Emergency Powers. This provision amends Section 303 to authorize injunctive actions and emergency orders for air pollution episodes which threatening to the public health and welfare.

Senate Bill, as Reported out on November 16, 1989	Administration Position
Expands EPA's emergency order authority to situations posing an imminent and substantial endangerment to the "public health or welfare, or the environment". Amends the Act to make violations of §303 emergency orders enforceable pursuant to Section 113, and eliminates numerous limitations on the emergency order authority.	Same.

Why this Measure is Important:

o Amends Section 303 to not only authorize orders where an air pollution release poses an endangerment to the health of persons but also to protect the public welfare and the environment (e.g. wilderness areas or commercial interests).

o Orders limited to 24 or 48 hour durations unless EPA determines that a state has not adequately addressed the problem.

o Authorizes enforcement of §303 orders pursuant to §113, e.g. $25,000 per day penalties.

o No need to prove willfulness in civil actions.

o Criminal sanctions available for knowing violations.

Title VI

Issue: Contractor Listings. This amendment expands existing authority to allow EPA to exclude any facility owned or operated by any person criminally convicted, under Section 113, from federal contracts, grants or loans.

Senate Bill, as Reported out on November 16, 1989	Administration Position
Amends §306 to provide that any criminal conviction under the Act will result in mandatory listing (including criminal convictions under new authorities and under mobil sources provisions). Also, gives the Administrator flexibility to apply the listing to any facility owned or operated by the person violating, as opposed to just the violating facility, where appropriate. Clarifies steps to be removed from the list.	Same.

Why This Measure is Important:

o Assists in sanctioning asbestos contractors and others who move from facility to facility, or frequently change business names.

o Provides the same mandatory listing sanction for mobil source violations as is available for stationary source violations.

Title VI

Issue:Judicial Review Pending Reconsideration of Regulation. This amendment clarifies timeframes and circumstances under which Agency actions may be petitioned.

Senate Bill, as Reported out on November 16, 1989	Administration Position
Amends §307(b)(1) to provide that a petition for agency review does not render Agency action non-final for purposes of judicial review and does not toll the 60-day time period for seeking judicial review.	Same.

Why This Measure is Important:

o Ensures that all challenges to final agency rules will be brought expeditiously within the 60-day period provided in Section 307.

o Prevents dilatory petitions and disparate treatment of the regulated community.

o Without the Amendment, application of an air pollution requirement might be stayed with regard to a petitioning entity while other similarly situated facilities would be required to comply.

Title VI

Issue: Citizen Suits. This amendment provides for the assessment of civil penalties in citizen suits and clarifies the conditions under which complaints and settlements are to be addressed.

Senate Bill, as Reported out on November 16, 1989	Administration Position
Amends §304 to authorize courts to assess civil penalties in citizen suits, as in the Clean Water Act and RCRA. The penalties would be deposited in a special fund in the U.S. Treasury for use by EPA in air enforcement and compliance efforts.	Same.
Further amends §304 to confirm that the United States is not bound by a lawsuit to which it is not a party, and to require service of significant citizen suit pleadings on the Administrator and Attorney General.	

Why This Measure is Important:

o Conforms CAA to other environmental statutes and improve the utility of the citizen suit provisions. Currently penalties not authorized in citizen enforcement actions. Consequently such actions do not result in complete relief and punishment.

o Citizens do not have to notify the government of the commencement of an action under the Act.

o Notice and copying provisions will ensure that citizen suits will not force the government's hand and will keep the government better informed of the progress of litigation.

Title VI

Issue: Enhanced Implementation and Enforcement of New Source Review Requirements. This provision clarifies that new source construction and operation may not commence until all new source review requirements are met.

Senate Bill, as Reported out on November 16, 1989	Administration Position
This section clarifies that operation, as well as construction and modification, of major sources not meeting new source review requirements is prohibited, and that section 167 administrative orders regarding new sources can be directly enforced both civilly and criminally under section 113.	Same.

Why This Measure is Important:

o Allows EPA to enforce new source requirements against sources which have already begun "operation".

Title VI

Issue: Movable Stationary Sources. This provision defines portable operations (e.g., asphalt batch plants, etc.) which are subject to stationary source requirements.

Senate Bill, as Reported out on November 16, 1989	Administration Position
Amends §302 definition of stationary source to confirm that movable stationary sources, e.g., mobile asphalt batch plants and ships at port, are subject to the CAA stationary source requirements.	Same.

Why This Measure is Important:

o Movable sources emit process emissions which are best regulated by the stationary source requirements and must meet the technical definition of stationary source.

Title VI

Issue: Enforcement of New Titles of the Act. This provision expands current Section 120 authority to allow for recovery of economic benefits derived from noncompliance with Titles IV & V of the Act.

Senate Bill, as Reported out on November 16, 1989	Administration Position
The Senate bill has no similar provision	Amends Section 120 of the Act to ensure EPA's ability to recover the economic benefit of noncompliance against violators of the new authorities proposed in Titles IV and V governing permits and acid deposition.

Why the Administration's Position is Better:

o Section 120 is an authority to equalize the economic effects of environmental regulations.

o Absent the amendment EPA would not be able to put violators of the new authorities in the same financial position as persons trying in good faith to comply.

o Law abiding persons would, consequently, be placed at an economic disadvantage.